

385  
B252a

# Analysis of Railroad Reports.

HARVEY

NEW YORK

THE UNIVERSITY  
OF ILLINOIS  
LIBRARY

385  
B252a

LIBRARY  
SEMINAR

& SONS

BOSTON

IN

Gove

and

ailroad

Bonds

## Investment Securities

Philadelphia, represented by JAMES H. CHAPMAN, 421 Chestnut Street

Hartford, Ct., represented by R. T. H. BARNES, Aetna Life Building

Chicago, represented by D. K. DRAKE, Continental National Bank Building

---

OUR LIST OF INVESTMENT SECURITIES SENT ON APPLICATION

Redmond, Kerr & Co.  
BANKERS

CHICAGO:  
232 LA SALLE STREET.

41 Wall Street, New York.

PHILADELPHIA:  
GRAHAM, KERR & CO.

DEALERS IN

High Grade  
Investment Securities

Transact a General Foreign and Domestic Banking Business. Receive deposits subject to draft. Dividends and interest collected and remitted. Act as Fiscal Agents for and negotiate and issue loans of railroads, street railways, gas companies, etc. Securities bought and sold on commission.

Members of New York Stock Exchange.

Issue Travelers'  
LETTERS OF CREDIT

Available throughout the world.

# J. S. BACHE & CO.

## Bankers and Brokers

66 Exchange Place,

New York.

---

### MEMBERS OF

N. Y. Stock Exchange

N. Y. Produce Exchange

Philadelphia Stock Exchange

N. Y. Cotton Exchange

Chicago Board of Trade

New Orleans Cotton Exchange

N. Y. Coffee Exchange

Chicago Stock Exchange

Liverpool Cotton Association

---

### BRANCH OFFICES

WALDORF-ASTORIA COURT, N. Y., and at ALBANY, TROY, ROCHESTER, BURLINGTON, VT.,  
MONTREAL, CANADA, PHILADELPHIA, ATLANTIC CITY, SARATOGA SPRINGS,  
and LIVERPOOL, ENGLAND.

---

DIRECT PRIVATE WIRES TO ALL IMPORTANT CENTERS.

W. L. STOW & CO.

Bankers and Brokers

44 EXCHANGE PLACE

Broad Exchange Building      NEW YORK

WM. LANMAN BULL.

FREDERIC VAN LENNEP.

FREDERIC BULL.

HENRY W. BULL.

R. M. STUART WORTLEY.

# EDWARD SWEET & Co.

...Bankers and Brokers...

*38 BROAD STREET,*

*NEW YORK.*

Members of the New York Stock Exchange.

PRIVATE WIRES TO ALL PRINCIPAL CITIES.

Dealers in High Grade Investment securities.

List of current offerings sent on application.

E. C. STANWOOD & Co.

» Bankers »

121 Devonshire Street, Boston.



Municipal, Railroad and Corporation Bonds

AND OTHER INVESTMENT SECURITIES.

---

CORRESPONDENCE SOLICITED.

---

LISTS MAILED ON APPLICATION.

# Guaranty Trust Co. of New York

Mutual Life Building

NASSAU, CORNER CEDAR STREET.

**LONDON OFFICES**, 33 LOMBARD ST., E. C. 60 ST. JAMES ST. S. W.

Fiscal Agents of the  
United States Government.

Manila, Philippine Islands.  
Hong Kong, China.

Depository of the Government of the  
Philippine Islands, Manila.

**CAPITAL, \$2,000,000**

**SURPLUS AND UNDIVIDED PROFITS, \$5,180,000**

**INTEREST ALLOWED ON DEPOSITS SUBJECT TO CHECK OR ON CERTIFICATE.**

Acts as Trustee for Corporations, Firms and Individuals ; and as Guardian, Executor and Administrator ;

Takes entire charge of Real and Personal Estates ; carefully selected securities offered for investment.

**TRAVELERS' LETTERS OF CREDIT AVAILABLE IN ALL PARTS OF THE WORLD.**

**COMMERCIAL LETTERS OF CREDIT ISSUED.**

**DRAFTS** on all parts of Great Britain, France, Germany, China and Philippines **BOUGHT** and **SOLD**.

WALTER, G. OAKMAN, President.  
GEORGE R. TURNBULL, 2d Vice-President.  
WM. C. EDWARDS, Treasurer.  
E. C. HEBBARD, Secretary.

ADRIAN ISFLIN, Jr., Vice-President.  
HENRY A. MURRAY, 3d Vice-President.  
JOHN GAULT, Manager Foreign Department.  
F. C. HARKIMAN, Assistant Treasurer.

R. C. NEWTON, Trust Officer

## DIRECTORS:

George F. Baker.  
George S. Bowdoin.  
August Belmont  
Frederic Cromwell.

Walter R. Gillette.  
G. G. Haven.  
E. H. Harriman.  
R. Somers Hayes.

Charles R. Henderson.  
Adrian Iselin, Jr.  
Augustus D. Jailliard.

James N. Jarvie.  
Richard A. McCurdy.  
Levi P. Morton.

Alexander E. Orr.  
Walter G. Oakman.  
Henry H. Rogers.

H. McK. Twombly.  
Frederick W. Vanderbilt.  
Harry Payne Whitney.

## LONDON COMMITTEE:

ARTHUR J. FRASER, Chairman ; DONALD C. HALDEMAN.



JAS. H. OLIPHANT,

(Members N. Y. Stock Exchange.)

ALFRED L. NORRIS

JAS. H. OLIPHANT & CO.

BANKERS AND BROKERS,

20 BROAD STREET,

NEW YORK.

TELEPHONE, 3907 CORTLANDT.

Established 1868.

Offices connected by private wires

# CHARLES HEAD & CO.

74 State St. BOSTON

17 Broad St. NEW YORK

## BANKERS AND BROKERS

Boston and New England

Securities a Specialty

Members of the New York

and Boston Stock Exchanges

**PHENIX** INSURANCE  
COMPANY.

OF BROOKLYN, N. Y.

---

NEW YORK OFFICE,  
47 CEDAR ST.

# N. W. HALSEY & CO.

## BANKERS

49 WALL STREET

ATLANTIC BUILDING

NEW YORK

DEALERS IN

**Bonds and Guaranteed R. R. Stocks**

Negotiate entire New or Refunding  
Issues of Railroad, Street Railway, Gas,  
Electric Light and Power Company Bonds

**Government and Municipal Bonds BOUGHT and SOLD**

Represented in New England by

**MERRILL, OLDHAM & CO.**

40 WATER ST., BOSTON, MASS.

ANALYSIS  
OF  
RAILROAD REPORTS

BEING A DETAILED ANALYSIS, AND A COMPARISON  
IN TABULATED FORM, OF THE

ANNUAL REPORTS OF RAILROADS

FOR THE LAST TWO FISCAL YEARS.

---

*Howard  
Hirton  
Gilbert* BY  
H. C. G. BARNABY.

---

COPYRIGHT, 1902, BY H. C. G. BARNABY.

---

METROPOLITAN ADVERTISING CO.,  
DISTRIBUTING AGENTS,  
6 WALL STREET, NEW YORK CITY.


# LATHROP & SMITH

Established in 1879, at


37 BROAD STREET, NEW YORK CITY.

## BANKERS AND BROKERS



*Transact a General Stock Exchange Business* 

*Advances Made on New York Stock Exchange Collateral*

*Special Attention Given to Investment Securities* 



L. C. LATHROP

Member { N. Y. Stock Exchange  
N. Y. Cotton Exchange

OSCAR B. SMITH

F. M. CRONISE

385  
B252a

PREFACE.

---

Desiring to pursue the study of railroad finance along lines not covered by any available publication, I found it necessary to prepare my own statistics. The result may not prove unprofitable reading. It is here presented, with the hope that investors and railroad officials may be interested.

H. C. G. BARNABY,

37 BROAD STREET,  
NEW YORK CITY.

578626

# North American Trust Company,

135 BROADWAY, NEW YORK

Capital and Surplus,       =       =       \$4,800,000

## TRUSTEES

Horace E. Andrews  
H. S. Black  
Wm. H. Chesebrough  
Jonathan B. Currey  
Heman Dowd  
R. L. Edwards  
H. B. Hollins  
John Hone  
James Jourdan  
James S. Kuhn  
Charlton T. Lewis  
Allan McCulloh  
Joy Morton  
Jos. J. O'Donohue, Jr.  
E. C. Potter  
John J. Riker  
Henry F. Shoemaker  
Edwin Thorne  
Oakleigh Thorne  
John C. Tomlinson  
Warner Van Norden  
Richard N. Young

**EXECUTES TRUSTS**  
*of every description*

## OFFICERS

**OAKLEIGH THORNE,**  
President.

**HEMAN DOWD,**  
**WM. H. CHESEBROUGH,**  
**RICHARD J. SCOLES,**  
Vice-Presidents.

**S. D. SCUDDER, Treas.**  
**G. M. WYNKOOP, Sec'y**  
**FRANCIS C. PREST,**  
Ass't Secretary

**Receives Deposits**  
subject to Check

**Pays Interest**  
on daily balances

**Collects Coupons,**  
Notes, Checks and other  
obligations.

**Issues Certificates**  
of Deposit, bearing interest.

**Acts as Trustee**  
of Mortgage Bonds and  
individual trusts.

**Registrar and Transfer**  
Agent

**Manages Estates**  
as Receiver, Executor,  
Administrator or Trustee.

**Acts as Fiscal Agent**  
for Underwriting and  
Subscriptions



# INDEX.

Introductory Remarks.....	PAGE 7
Physical Condition.....	7
Assets and Liabilities.....	9
Income and Expenses.....	10
Maintenance Expenses.....	11
Passenger Traffic.....	11
Freight Traffic.....	12
Suggestions.....	13

## LIST OF ANALYZED RAILROAD REPORTS.

Ann Arbor Railroad.....	62-65
Atchison, Topcka and Santa Fe Railway.....	26-29
Baltimore and Ohio Railroad.....	90-93
Boston and Maine Railroad.....	110-113
Buffalo, Rochester and Pittsburgh Railway.....	110-113
Burlington, Cedar Rapids and Northern Railway.....	46-49
Canadian Pacific Railway.....	14-17
Canadian Southern Railway (see Michigan Central Railroad).....	98-101
Central of Georgia Railway.....	138-141
Central Railroad of New Jersey.....	122-125
Chesapeake and Ohio Railway.....	130-133
Chicago and Alton Railway.....	74-77
Chicago, Burlington and Quincy Railroad.....	54-57
Chicago and Eastern Illinois Railroad.....	82-85
Chicago Great Western Railway.....	74-77
Chicago, Indianapolis and Louisville Railway.....	86-89
Chicago, Milwaukee and St. Paul Railway.....	54-57
Chicago and North Western Railway.....	50-53
Chicago, Rock Island and Pacific Railway.....	46-49
Chicago, St. Paul, Minneapolis and Omaha Railway.....	50-53
Cleveland, Cincinnati, Chicago and St. Louis Railway.....	90-93
Cleveland, Lorain and Wheeling Railway.....	66-69
Colorado and Southern Railway.....	38-41
Delaware and Hudson Company.....	114-117
Delaware, Lackawanna and Western Railroad.....	114-117
Denver and Rio Grande Railroad.....	30-33
Erie Railroad.....	118-121
Evansville and Terre Haute Railroad.....	82-85
Fort Worth and Denver City Railway.....	38-41

Great Northern Railway.....	PAGE 18-21
Hocking Valley Railroad.....	62-65
Illinois Central Railroad.....	86-89
Iowa Central Railway.....	70-73
Lake Erie and Western Railroad.....	102-105
Lake Shore and Michigan Southern Railway.....	98-101
Lehigh Valley Railroad.....	126-129
Long Island Railroad.....	126-129
Louisville and Nashville Railroad.....	134-137
Mexican Central Railway.....	142-145
Michigan Central Railroad.....	98-101
Minneapolis and St. Louis Railroad.....	70-73
Minneapolis, St. Paul and Sault Ste. Marie Railway.....	14-17
Missouri, Kansas and Texas Railway.....	42-45
Missouri Pacific Railway.....	34-37
Nashville, Chattanooga and St. Louis Railroad.....	142-145
New York Central and Hudson River Railroad.....	106-109
New York, Chicago and St. Louis Railroad.....	102-105
New York, New Haven and Hartford Railroad.....	106-109
New York, Ontario and Western Railway.....	118-121
Northern Pacific Railway.....	18-21
Norfolk and Western Railway.....	130-133
Pennsylvania Company.....	94-97
Pennsylvania Railroad.....	94-97
Pittsburgh, Cincinnati, Chicago and St. Louis Railway.....	94-97
Reading Company.....	122-125
Rio Grande Western Railway.....	30-33
St. Joseph and Grand Island Railway.....	78-81
St. Louis and San Francisco Railroad.....	26-29
St. Louis Southwestern Railway.....	42-45
Seaboard Air Line Railway.....	138-141
Southern Pacific Company.....	22-25
Southern Railway.....	134-137
Texas and Pacific Railway.....	34-37
Toledo, St. Louis and Western Railway.....	78-81
Union Pacific Railroad.....	22-25
Wabash Railroad.....	58-61
Wheeling and Lake Erie Railroad.....	58-61
Wisconsin Central Railway.....	66-69
Appendix.....	147

# The Audit Company of New York.

AUGUST BELMONT,  
*Acting President.*

WILLIAM A. NASH,  
*Vice-President.*

JOHN J. MITCHELL,  
*Vice-President.*

THOMAS L. GREENE,  
*Vice-President and General Manager.*

GEORGE W. YOUNG,  
*Treasurer.*

F. C. RICHARDSON,  
*Assistant Treasurer.*

EXAMINATIONS.



APPRAISALS.



AUDITS.

Investigations for Financing and Underwriting and for Reorganization Committees.

## Directors:

AUGUST BELMONT,  
August Belmont & Co., New York.  
WILLIAM A. NASH,  
President Corn Exchange Bank, New York.  
JOSEPH S. AUERBACH,  
Davies, Stone & Auerbach, New York.  
GEORGE G. HAVEN,  
Banker, New York.  
JAMES STILLMAN,  
President National City Bank, New York.  
CHARLES R. FLINT,  
Flint & Co., New York.  
GEORGE HARVEY,  
President Harper & Brothers, New York.

T. JEFFERSON COOLIDGE, JR.,  
Chairman of the Board, Old Colony Trust Company, Boston, Mass.  
GEORGE W. YOUNG,  
President United States Mortgage & Trust Company, New York.  
A. J. CASSATT,  
President Pennsylvania Railroad, Philadelphia, Penna.  
WILLIAM B. LEEDS,  
President Chicago, Rock Island & Pacific Railroad, New York.  
JOHN I. WATERBURY,  
President Manhattan Trust Company, New York.  
DUMONT CLARKE,  
President American Exchange National Bank, New York.

**NEW YORK,**  
Mutual Life Buildings,  
43 Cedar Street.

**PHILADELPHIA,**  
Arcade Building,  
15th and Market Streets.

**CHICAGO,**  
New York Life Building,  
La Salle and Monroe Streets.

# ANALYSIS OF RAILROAD REPORTS.

## INTRODUCTORY REMARKS.

It is probably because so many different methods of bookkeeping are employed by our railroads in presenting their annual reports that statisticians have never published complete detailed comparisons of these reports. In the first place, hardly more than seventy railroads present reports detailed enough for close comparison. As the tendency is growing towards greater uniformity in railroad reports, in line with the rulings of the Interstate Commerce Commission, we may in future hope for more publications with the same aim as has this.

I have attempted to tabulate under convenient headings such facts as are important to know about all railroads; then to rewrite each annual report to conform to these tables. Some of the statistics presented have not been in print before, but were obtained through personal correspondence with officials of the various railroads.

The tables of statistics for each road occupy four pages. The tables are the same for each railroad; they are so arranged as to admit of the statistics of two railroads to each page; and so far as possible, affiliated railroads have been grouped, to facilitate comparisons. The statistics cover the last two fiscal years. On each page a column is left blank, wherein the reader may, if he so desire, insert the figures from a later report.

There are over eighty-five items tabulated about each railroad; they are so selected that any additional fact which the reader may wish to know may be found by combining two or more of the facts given. Thus it is believed that these tables cover every important point about a railroad of which the annual reports make mention.

The following pages explain the tables in detail:

## PHYSICAL CONDITION.

**MILEAGE.**—Under "mileage owned, leased and controlled by ownership of stock" is placed the total mileage in which each railroad is interested, whether through trackage rights, joint management, or some other form of contract; the mileage of water lines, if known, is included, or added in a foot-note.

Almost every railroad reports its "average mileage operated" during the year. One aim of this book is to enable the reader to compare any two railroads MILE FOR MILE. It is useless to attempt, for instance, to compare the total earnings,

expenses, equipment, etc., of Ontario and Western and New York Central. The latter road is seven times as long as the former. But if you know the earnings, the traffic, the equipment, the ballast—for each mile of road operated—you can compare the two quite readily.

**BALLAST.**—All too few railroads report fully the conditions of their roadbeds. Under the headings, “mileage ballasted” and “mileage of various kinds of ballast”, are included, wherever the facts are known, the ballasted mileage of second tracks and sidings as well as of single track.

**SECOND TRACK.**—As all of the statistics here given are based on the “average mileage operated” of single track, careful notice should be taken of the “mileage of second, third and fourth main tracks.” All per mile statistics of roads having a considerable percentage of second, third and fourth tracks must needs be larger than those of a road with no second track.

**TIES.**—Many and varying estimates have been made of the number of cross-ties that should be used in renewals every year, in a single mile of railroad. The average life of a tie depends upon the geographical location, the kind of wood, the ballast, and so on. Bearing in mind the additional requirements of double-tracked roads, the “number of ties renewed in track per mile” should be interesting as an indication of physical condition.

**RAILS.**—Wherever the distribution of the various weights of rails is recorded in the annual report, the mileage of the principal weights is given here. The distribution of rails in second tracks and sidings is included if known. Do not condemn a railroad for having light rails unless the density of its traffic is great enough to demand heavier rails. It would be as wasteful to equip St. Louis Southwestern entirely with one hundred pound rails as it would be to attempt to care for the traffic of Pennsylvania on a roadbed laid with fifty pound rails.

**EQUIPMENT.**—Under the headings showing locomotives, freight cars and passenger cars owned, per mile, is grouped all equipment owned, leased or purchased on credit and held under equipment trust agreements. Figures for locomotive equipment exclude, wherever the reports are sufficiently clear, all locomotives used for maintenance of roadway and other service to the company. The same distinction is made as to freight cars. All cars in passenger train service, including baggage, mail and express cars, are included as passenger cars. The traffic density of each railroad should be investigated as indicative of the requirements in the way of equipment.

**ASSETS AND LIABILITIES.**

**CAPITAL STOCKS AND BONDS.**—"Stocks outstanding, per mile," includes only that stock which is in the hands of the public. Treasury stock is always deducted. The same is true with regard to bonds. Under "bonds outstanding" are included guaranteed bonds and all equipment trust notes excepting such as are current liabilities.

**INVESTMENTS.**—Each railroad's report of stocks and bonds owned has been carefully examined. All stocks and bonds of constituent parts of the road in question have been deducted. The object has been to exclude investments in securities of those companies which contribute to gross earnings and to include only such investments as contribute to "miscellaneous income". For instance, Missouri Pacific, in its list of securities owned, includes the stock of the Central Branch Railway. But the mileage of the Central Branch Railway is included in the mileage of the Missouri Pacific system, and its gross earnings are also there included. On the other hand, Missouri Pacific's holdings of Texas and Pacific second income bonds increase, not the former's gross earnings, but add to "miscellaneous income"; and the mileage of Texas and Pacific is not included in the Missouri Pacific system. Therefore, the holdings of Central Branch Railway stock ARE NOT included and the holdings of Texas and Pacific income bonds are included in the analysis of Missouri Pacific, under the heading "various stocks and bonds in treasury, per mile". There is no uniformity shown in stating the value of the investments. Some railroads include their investments in their balance sheets, at cost; some at their par value; others at a book value or estimated value; still others make no statement of the basis of valuation used. Wherever the report makes it clear which method of valuation is employed, a foot note is added to the tables. How little reliance may be placed upon the average railroad's report of its investments is evidenced by the report of the Chicago and North Western for 1902, wherein an investment in 147,000 shares of Chicago, St. Paul, Minneapolis and Omaha capital stock is valued at \$10,000,000—not one-half of its market value.

**FIXED CHARGES.**—Under fixed charges are included taxes, rentals, and, in most cases, sinking fund payments and insurance charges—in short, all charges that must be paid before debenture or income bond interest, or stock dividends are distributed. If actual bankruptcy should threaten any of the railroads, some of the charges included as fixed could be eliminated. As fixed charges include all charges ahead of dividend payments, the "charges ahead of common stock" are simply the fixed charges, plus the full dividend requirements of all the preferred stocks, income and debenture bonds outstanding.

**CURRENT ASSETS AND CURRENT LIABILITIES.**—Perhaps this work is too critical in its treatment of current assets. Every report, however, has been treated alike. The aim is to show how much actual cash is on hand or is collectable on demand.

The value of \* material and supplies on hand has been excluded. The same with \* investment holdings—which might indeed be disposed of to meet immediate money requirements—but of which record has already been made. Current liabilities include all bills, taxes and interest payments due and accrued. Whenever railroads report reserve funds, sinking funds, insurance funds, etc., which in the balance sheets are recorded as liabilities, these funds are excluded from current liabilities. The money or investments representing these funds is by a few roads reported separately as a contingent asset. In such cases the amount is not included in current assets.

**TOTAL SURPLUS.**—All railroads balance their asset and liability accounts by the addition of a profit and loss surplus. Because of the different methods of bookkeeping in use, this item is of but little value. Many people, however, concede much importance to the item of “total surplus”; it is therefore recorded here. Railroads have such different methods of charging off large or small sums for depreciation, that oftentimes the company in the stronger financial condition reports the smaller surplus, and vice versa.

**RESERVE FUNDS.**—Many companies have special “reserve funds for betterments”, which consist of appropriations from income as well as from capital account. Expenses for new equipment, additions to property, etc., are often charged to these funds.

### INCOME AND EXPENSES.

**GROSS EARNINGS.**—The test of over-capitalization is often found in the “percentage of gross earnings to capital”.

**EXPENSES.**—Some companies include taxes in their reports of expenses; some do not. Therefore, the “percentage of expenses to gross earnings”, as reported by railroad companies, is often misleading. The reports are here made uniform, expenses appearing exclusive of taxes. An important matter is the consideration of the component parts of a railroad's expense account. The sum expended for conducting transportation and for general expenses shows the economy of operation. The expenses for maintenance of way and of equipment show how much is reinvested in the property to offset depreciation and to provide for new business. The percentages of these items to earnings and to expenses provide matter for helpful study. Almost every railroad reports its expenses in sufficient detail for close investigation. Remember that density of traffic has an important bearing on maintenance requirements.

**MISCELLANEOUS INCOME.**—Under “additional miscellaneous income” are included receipts from investments, from rentals, from coal properties, from water lines—all receipts that are not results of the direct operation of the railroad.

\* This is in accordance with the rulings of the Interstate Commerce Commission.



**SURPLUS.**—The surplus of a railroad during any fiscal year is rightly the amount remaining after the payment of all fixed charges. But often, from this surplus, appropriations are made for various betterments and for reserve funds. The “surplus earnings, per mile”, as reported in this book are after all such appropriations have been made; in each case the amount of such appropriation is added in a foot note, and the real surplus that could be made available for dividends is the sum of the two items.

### MAINTENANCE EXPENSES.

A fair comparison of the maintenance expenses of different companies is very difficult. Maintenance expenses per mile of road, differ because of the density of traffic. To report these expenses per train mile, as some roads do—that is, to report the amount expended in maintenance for each mile run by a train—is not fair, partly because of the varying lengths and loads of trains. The best measure of maintenance is probably the ton mile—or, in other words, the amount expended for each ton hauled one mile. Here again there is a discrepancy, for the greater the density of traffic—that is, the greater the number of ton miles—the smaller will be the amount expended per ton mile. Then again, the ton mile refers only to freight density; this fact alters the value of the measure only in the case of a railroad in which the proportion of freight traffic to total traffic is at variance with the general average.

The amount of money expended upon each locomotive, each freight car and each passenger car, for maintenance during the year, is governed by the age of the equipment, the density of traffic and the miles run by each locomotive or car. The maintenance expenses per mile run afford the best measure of the efficiency of maintenance and are here given. Figures for “service” locomotives and freight cars are omitted.

### PASSENGER TRAFFIC.

In most books and treatises on railroad matters, investigation is limited to earnings and expenses. The details of passenger traffic and of freight traffic are quite generally ignored. And yet the management of traffic is often the all important point, indicating the cause of success or of failure. The statistics of traffic have therefore been made as complete as possible, although, unfortunately, many railroads fail to give complete returns on these points.

The density of passenger traffic is found in the number of “passenger miles, per mile”. The unit of measure is the passenger mile. The total passenger miles of any railroad equals the number of passengers carried multiplied by the average distance that each passenger travels.

The "passenger train mileage" is exclusive of the mileage of mixed trains, unless the report otherwise directs. The Interstate Commerce Commission rules that mixed train mileage be included in both passenger and freight train mileage. Very few railroads, however, have as yet included it in passenger train mileage and the items dependent thereon.

The "passenger car mileage" includes the mileage of express, of baggage and of mail cars—of all cars used in passenger trains. The "average number of cars, per passenger train", also includes all classes of cars.

The "average number of passengers, per car", has been found by dividing the number of passengers per train by the total number of cars of all kinds in each passenger train. It would have been better to have divided by the number of actual passenger cars, and thus to have given the correct average of passengers per passenger car. Too few railroads, however, furnish the statistics requisite for this latter arrangement.

"Gross earnings, per passenger", and gross earnings, per passenger, per mile traveled", include only those earnings contributed directly by passenger traffic. "Gross passenger earnings, per train mile", and "per car mile", include baggage, mail and express earnings.

### FREIGHT TRAFFIC.

The analysis of freight traffic excludes all "company freight", and refers only to revenue producing freight. The ton mile is the unit for measuring the density of freight traffic.

"Locomotive mileage" includes both passenger and freight locomotives; but "service" locomotive mileage is excluded. So also is "work" train mileage excluded, in the consideration of "freight train mileage". It is unfortunate that helping engine mileage is separately reported by but very few railroads. It would be a most useful item to insert in the tables at this point, for it is important to know the proportion of helping engine mileage to freight train mileage. Whenever the figures are known a foot-note states the amount of helping freight engine mileage. Although it is possible to approximate the amount of helping engine mileage in several cases, it is stated here only when it is correctly known. Unless the reports directs otherwise, mixed train mileage is included in "freight train mileage".

The statistics of "locomotive mileage, per locomotive", "freight car mileage, per car", and "per car, per day", as well as the statistics of "passenger car mileage, per car", are useful in determining the work done by equipment. The length of the railroad and the character of the freight hauled, influence the mileage of freight cars, per car. Unfortunately, very few railroads distinguish in their reports between the mileage contributed by their own cars and the mileage of foreign cars. The figures given here show the average mileage of each railroad's cars on its own system. Wherever simply the total mileage of all freight cars is reported, I have divided this total by the average number of freight cars in use during the year—or when the



average is not given, then by the total number owned—and have in each case added a foot-note, “report not clear on this point”. The only excuse for using these figures at all, when they are admittedly wrong, is that they are nearly right—probably a little higher than the correct figures: this is because the mileage of a railroad’s cars on foreign systems often about counter-balances the mileage of foreign cars on the home system. So few railroads report fully on these points, that the above is the only apparent way of approximating the facts.

In recording the principal articles of freight carried, merchandise is grouped under manufactures.

The remaining items need no explanation. Of course the average number of tons per train and per car, as well as the average number of passengers per train and per car, are the average number for each mile run by trains or by cars.

### SUGGESTIONS.

This book makes no pretense of giving all necessary information about railroad finance. Hundreds of books are issued, all more or less alike, covering points not mentioned herein. Such literature is at every hand, and its repetition here would make this book too cumbersome. The mission of this work is to cover new ground; to supply statistics which are important, but all too much neglected; and to answer questions that investors ask. For reference, however, by those who have no other books at hand, an appendix containing some general facts, is added.

There are more than eleven thousands statistics in this book. An occasional error should be excused.

It is not feasible in the previous pages to define fully the meaning and significance of each item in the tables. Every investor should be familiar with the meaning of the terms used. For further information along this line, I can do no better than to refer you to Mr. Thomas F. Woodlock’s excellent book, “The Anatomy of a Railroad Report”.

Just a word on the general use of the tabulated statistics. Do not lay too much stress upon the importance of a single item. Do not conclude that a railroad is too heavily capitalized, for instance, until you have examined the investments held in the treasury, and have noted the percentage of gross earnings to capital. Do not decide that the rate received from freight, per ton mile, is too small, unless you have carefully examined the character of the freight that is carried, and the amount carried per train—or the train-load. And so on. Study the annual reports and use these tables to help you analyze and compare them.

After careful study, the reader should be able to sum up all the facts recorded and to acquire a clear conception of the present condition of any of the railroads.

These tables analyze the roads as they are to-day, after years of development and progress. Their characteristics ought not to change so completely as to nullify the value of these statistics for some years to come.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.....	CANADIAN PACIFIC.		MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.		
	JUNE 31, 1901.	JUNE 31, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned. ....	4,878	5,096	1,302	1,412	1
2 Mileage owned, leased and controlled by ownership of Stock. ....	10,333	10,623	1,320	1,431	2
3 Average mileage operated. ....	7,563	7,588	1,312	1,396	3
4 Mileage ballasted.....					4
5 Mileage of various kinds of ballast.....					5
6 Mileage of second, third and fourth main tracks.....					6
7 Mileage of yard and side tracks.....	855	855	171	171	7
8 Number of ties renewed in track, per mile.....					8
9 Mileage of various weight rails.....	60, 72 and 80 lbs. per yd.		60, 72 and 80 lbs. per yd.		9
10 Number of Locomotives owned, per mile.....	.094	.098	.076	.076	10
11 Average tractive power of Locomotives.....pounds					11
12 Number of Freight Cars owned, per mile.....	2.66	2.79	5.4	5.65	12
13 Average capacity of Freight Cars.....pounds					13
14 Number of Passenger Cars owned, per mile.....	.107	.11	.054	.062	14

## ANALYSIS OF RAILROAD REPORTS.

15

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	CANADIAN PACIFIC.		MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>Year ending.....</b>					
<b>ASSETS AND LIABILITIES.</b>					
1 Stocks outstanding, per mile.....	<i>a</i> 20,698	<i>a</i> 22,052	1 16,006	15,043	1
2 Bonds outstanding, per mile.....	8,504	8,391	2 26,052	24,813	2
3 Total Stocks and Bonds, per mile.....	29,302	31,443	3 42,058	39,856	3
4 Various Stocks and Bonds in Treasury, per mile.....	5,023	<i>b</i> 5,469	4 115	103	4
5 Fixed Charges, including Taxes, per mile.....	966	967	5 1,254	1,239	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	23.6	19.6	6 36.4	27.8	6
7 Charges ahead of Common Stock, per mile.....	1,128	1,131	7 1,627	1,590	7
8 Amount of Common Stock outstanding, per mile.....	8,594	9,571	8 10,671	10,029	8
9 Total Current Assets.....	11,060,405	18,666,390	9 2,385,813	1,943,817	9
10 Total Current Liabilities.....	6,193,131	7,692,265	10 2,102,256	1,913,387	10
11 Total Surplus.....	11,122,561	14,185,635	11 988,753	2,275,255	11
12 Total Surplus, per mile.....	1,471	1,869	12 754	1,630	12
13 Reserve Funds, for Betterments, per mile.....			13	170	13
<b>INCOME AND EXPENSES.</b>					
14 Gross Earnings, per mile.....	4,080	4,942	14 3,442	4,456	14
15 Percentage of Gross Earnings to Capital.....	14	16.2	15 8.2	11.2	15
16 Expenses, per mile.....	2,479	3,086	16 1,954	2,107	16
17 Percentage of Expenses to Gross Earnings.....	60.75	62.44	17 56.1	47.3	17
18 Net Earnings, per mile.....	1,601	1,856	18 1,488	2,349	18
19 Additional Miscellaneous Income, per mile.....	123	126	19 15	25	19
20 Expenses for Maintenance of Way and Structure, per mile.....	<i>c</i> .....	<i>c</i> .....	20 473	490	20
21 Expenses for Maintenance of Equipment, per mile.....	<i>c</i> .....	<i>c</i> .....	21 363	373	21
22 Percentage of Gross Earnings for Maintenance.....	<i>c</i> .....	<i>c</i> .....	22 24.3	19.4	22
23 Percentage of Expenses for Maintenance.....	<i>c</i> .....	<i>c</i> .....	23 42.8	41	23
24 Expenses for Conducting Transportation, per mile.....	<i>c</i> .....	<i>c</i> .....	24 1,030	1,144	24
25 General Expenses, per mile.....	<i>c</i> .....	<i>c</i> .....	25 88	100	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	<i>c</i> .....	<i>c</i> .....	26 32.5	27.9	26
27 Surplus Earnings, per mile.....	<i>d</i> 758	<i>d</i> 1,016	27 250	<i>e</i> 922	27
28 Percentage of Gross Earnings for Surplus.....	18.5	20.6	28 7.2	20.7	28
29 Betterments charged to Reserve Funds, per mile.....			29	45	29

*a* Including debenture stock (47) amounting to \$7,981 per mile in 1901 and \$8,374 per mile in 1902. The interest is treated as a fixed charge.

*b* Canadian Pacific owns 18,603,023 acres of land.

*c* Canadian Pacific does not classify expenses as our Interstate Commerce Commission recommends.

*d* Canadian Pacific receives additional income from subsidies and from land sales; this income is applied to improvements. The amount in 1901 was \$145 per mile; in 1902, \$545 per mile.

*e* After deducting \$215 per mile appropriated for betterments.

## Statistics of—Maintenance—Passenger Traffic.

Name of Railroad.....	CANADIAN PACIFIC.		MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.	
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.
<b>MAINTENANCE EXPENSES.</b>				
1 Maintenance of Way and Structure, per ton mile .....			1 .116	.118
2 Maintenance of Equipment, per ton mile .....			2 .089	.084
3 Maintenance of Passenger Cars, per car.....			3 904	728
4 Maintenance of Freight Cars, per car.....			4 28	27
5 Maintenance of Locomotives, per locomotive .....			5 1,764	1,757
6 Maintenance of Passenger Cars, per car, per mile run.....			6 1.045	.928
7 Maintenance of Freight Cars, per car, per mile run .....			7 .426	.388
8 Maintenance of Locomotives, per locomotive, per mile run.....			8	
<b>PASSENGER TRAFFIC.</b>				
9 Number of passengers carried, per mile.....	573	632	9 364	433
10 Passenger miles, per mile.....	55,448	70,477	10 30,005	41,568
11 Passenger train mileage, per mile.....	1,027	1,094	11 a 952	a 955
12 Passenger car mileage, per mile.....			12 4,681	4,891
13 Passenger car mileage, per car .....			13 86,501	78,481
14 Average number of cars, per passenger train.....			14 a 4.92	a 5.12
15 Average number of passengers, per passenger train .....	54	64.4	15 a 32	a 44
16 Average number of passengers, per car .....			16 a 6.5	a 8.7
17 Average distance travelled, per passenger. ....	96.6	111.5	17 82.37	96.05
18 Gross earnings, per passenger .....	186.44	195.13	18 183	208
19 Gross earnings, per passenger, per mile travelled.....	1.93	1.75	19 2.22	2.17
20 Gross passenger earnings, per train mile.....	127.47	135.94	20 a 95.34	a 120.79
21 Gross passenger earnings, per car mile.....			21 a 19.38	a 23.59
22 Percentage of passenger expenses to earnings.....			22	

a In determining these items, mixed train mileage is included as passenger train mileage. Mixed train mileage per mile operated amounted in 1901 to 188 miles, and in 1902 to 182 miles.

## Statistics of Freight Traffic.

Name of Railroad.....	CANADIAN PACIFIC.		MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile .....	946	1,156	1 2,266	2,317	1
2 Revenue ton miles, per mile.....	313.170	428,034	2 407,687	442,376	2
3 Freight train mileage, per mile.....	1,377	1,696	3 a 1,297	a 1,405	3
4 Locomotive mileage, per mile.....			4		4
5 Freight car mileage, per mile.....			5 35,492	39,283	5
6 Locomotive mileage, per locomotive.....			6		6
7 Freight car mileage, per car.....			7 b 6,574	b 6,959	7
8 Freight car mileage, per car, per day.....			8 b 18	b 19 1	8
9 Average number of all freight cars, per freight train.....			9 27.37	27.95	9
10 Average number of empty freight cars, per freight train.....			10 6.73	6.75	10
11 Percentage of loaded car mileage to total car mileage.....			11 75.4	76.1	11
12 Average revenue tons, per freight train.....	229	240.6	12 314.49	314.88	12
13 Average revenue tons, per loaded car.....			13 15.24	14.85	13
14 Average revenue tons, per loaded and empty car.....			14 11.5	11.5	14
15 Average distance of haul, per ton of freight. .... miles	333.2	370.3	15 179.94	191.01	15
16 Gross earnings, per ton..... cents	263.23	277.73	16 110	141	16
17 Gross earnings, per ton, per mile hauled..... cents	.79	.75	17 .617	.739	17
18 Gross freight earnings, per train mile.....cents	182.25	188.64	18 194.25	233	18
19 Gross freight earnings, per car mile.....cents			19 7.10	8.34	19
20 Percentage of freight expenses to earnings.....			20		20
21 Principal articles of freight and percentage of tonnage from each .....			21		21

a Mixed train mileage is included with freight train mileage as well as with passenger train mileage.

b Report not clear on this point.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.....	NORTHERN PACIFIC.		GREAT NORTHERN.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Mileage owned.....	5,363	5,453	1 3,803	3,799	1
2 Mileage owned, leased and controlled by ownership of Stock.....	5,649	5,750	2 5,451	5,819	2
3 Average mileage operated.....	5,100	5,019	3 5,202	5,219	3
4 Mileage ballasted.....			4		4
5 Mileage of various kinds of ballast.....			5		5
6 Mileage of second, third and fourth main tracks.....	61	62	6 81	81	6
7 Mileage of yard and side tracks.....	1,486	1,576	7 998	1,116	7
8 Number of ties renewed in track, per mile.....	418		8		8
9 Mileage of various weight rails.....	2,374.....56 lbs. per yd.....2,065	1,222.....66 lbs. per yd.....1,172	9		9
	1,179.....72 lbs. per yd.....1,437				
10 Number of Locomotives owned, per mile.....	.138	.159	10 .108	.116	10
11 Average tractive power of Locomotives..... pounds			11		11
12 Number of Freight Cars owned, per mile.....	5.26	6.33	12 4.5	4.84	12
13 Average capacity of Freight Cars.....pounds	51,800	51,800	13		13
14 Number of Passenger Cars owned, per mile.....	.116	.136	14 .082	.093	14
15 Aggregate length of wooden bridges.....feet	437,130	391,567	15		15

## ANALYSIS OF RAILROAD REPORTS.

19

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	NORTHERN PACIFIC.		GREAT NORTHERN.		
Year ending .....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	30,392	30,883	1 20,670	23,682	1
2 Bonds outstanding, per mile.....	34,310	57,002	2 18,614	39,183	2
3 Total Stocks and Bonds, per mile.....	64,702	87,885	3 39,284	62,865	3
4 Various Stocks and Bonds in Treasury, per mile.....	a 1,224	a 24,138	4 d 6,505	d 28,491	4
5 Fixed Charges, including Taxes, per mile.....	1,461	1,573	5 895	949	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	42.9	19.1	6 16.4	13.8	6
7 Charges ahead of Common Stock, per mile.....	2,049	1,573	7 895	949	7
8 Amount of Common Stock outstanding, per mile.....	15,686	30,883	8 20,582	23,596	8
9 Total Current Assets.....	12,939,628	12,144,124	9 10,162,197	10,911,130	9
10 Total Current Liabilities.....	7,811,821	9,058,705	10 11,112,719	6,150,484	10
11 Total Surplus.....	6,507,423	8,054,710	11 7,000,587	e 11,079,101	11
12 Total Surplus, per mile.....	1,276	1,605	12 1,364	2,111	12
13 Reserve Funds, for Betterments, per mile .....	1,512	266	13 305	577	13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	6,384	8,246	14 5,450	6,864	14
15 Percentage of Gross Earnings to Capital.....	9.9	9.4	15 14	10.9	15
16 Expenses, per mile.....	3,263	4,241	16 3,046	3,389	16
17 Percentage of Expenses to Gross Earnings.....	51.1	51.4	17 55.88	49.37	17
18 Net Earnings, per mile.....	3,121	4,005	18 2,404	3,475	18
19 Additional Miscellaneous Income, per mile.....	146	168	19 366	419	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,029	1,348	20 846	896	20
21 Expenses for Maintenance of Equipment, per mile.....	482	678	21 453	519	21
22 Percentage of Gross Earnings for Maintenance.....	23.7	24.6	22 23.8	20.6	22
23 Percentage of Expenses for Maintenance.....	46.3	47.8	23 42.6	41.8	23
24 Expenses for Conducting Transportation, per mile.....	1,581	2,020	24 1,490	1,609	24
25 General Expenses, per mile.....	171	194	25 257	275	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	27.4	26.7	26 32.1	28.9	26
27 Surplus Earnings, per mile.....	b 1,807	b 2,002	27 1,875	2,564	27
28 Percentage of Gross Earnings for Surplus.....	28.3	24.3	28 34.4	37.4	28
29 Betterments charged to Reserve Funds, per mile.....	c 988	1,270	29 .....	.....	29

a Book value.

b After appropriating \$394 per mile for betterments in 1901 and \$398 per mile in 1902.

c Approximate.

d Cost to Company.

e Exclusive of bonds redeemed through sinking funds, total being \$8,317,400 up to June 30, 1901, or \$1,599 per mile, and \$9,329,400 up to June 30, 1902, or \$1,777 per mile.

f After deducting \$381 per mile appropriated for betterments. This is the surplus of the entire Great Northern system, as all figures in this analysis are for the entire operated railge.



## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	NORTHERN PACIFIC.		GREAT NORTHERN.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.215	.205	1 .174	.148	1
2 Maintenance of Equipment, per ton mile.....cents	.101	.103	2 .095	.085	2
3 Maintenance of Passenger Cars, per car.....	604	584	3 .....	.....	3
4 Maintenance of Freight Cars, per car.....	36	41	4 .....	.....	4
5 Maintenance of Locomotives, per locomotive.....	1,800	2,029	5 .....	.....	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.935	.893	6 .....	.....	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.411	.446	7 .....	.....	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	4.66	5.07	8 .....	.....	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	647	835	9 522	666	9
10 Passenger miles, per mile.....	60,553	80,003	10 41,206	54,548	10
11 Passenger train mileage, per mile.....	1,005	1,211	11 824	880	11
12 Passenger car mileage, per mile.....	7,502	8,891	12 .....	.....	12
13 Passenger car mileage, per car.....	64,629	65,375	13 .....	.....	13
14 Average number of cars, per passenger train.....	7.5	7.34	14 .....	.....	14
15 Average number of passengers, per passenger train.....	a 51.8	a 59.57	15 50	62	15
16 Average number of passengers, per car.....	6.9	8.1	16 .....	.....	16
17 Average distance traveled, per passenger..... miles	93.6	97	17 79	82	17
18 Gross earnings, per passenger.....cents	213	212	18 180.91	190.814	18
19 Gross earnings, per passenger, per mile traveled.....cents	2.27	2.18	19 2.29	2.327	19
20 Gross passenger earnings, per train mile.....cents	168.18	173.23	20 122.45	151.97	20
21 Gross passenger earnings, per car mile.....cents	22.42	23.6	21 .....	.....	21
22 Percentage of passenger expenses to earnings.....	.....	.....	22 .....	.....	22

a Probably a portion of the mixed train mileage was included as passenger train mileage, in arriving at this result, which is here presented as reported by the company.



## Statistics of Freight Traffic.

Name of Railroad.....	NORTHERN PACIFIC.		GREAT NORTHERN.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Number of revenue tons carried, per mile.....	1,724	2,208	1,908	2,522	1
2 Revenue ton miles, per mile.....	478,561	637,552	477,076	607,776	2
3 Freight train mileage, per mile.....	b 1,475	b 1,898	c 1,251	c 1,455	3
4 Locomotive mileage, per mile.....	3,816	4,448			4
5 Freight car mileage, per mile.....	46,330	57,223	38,254	47,934	5
6 Locomotive mileage, per locomotive.....	38,618	40,027			6
7 Freight car mileage, per car.....	a 8,752	a 9,185	a 8,494	a 9,906	7
8 Freight car mileage, per car, per day.....	a 24	a 25.2	a 23.3	a 27.2	8
9 Average number of all freight cars, per freight train.....	31.4	31.09	30.57	32.93	9
10 Average number of empty freight cars, per freight train.....	8.17	8.5	6.36	8.43	10
11 Percentage of loaded car mileage to total car mileage.....	73.01	72.65	79.2	74.4	11
12 Average revenue tons, per freight train.....	324.37	346.37	381.29	417.595	12
13 Average revenue tons, per loaded car.....	14.15	15.34	16.06	17.03	13
14 Average revenue tons, per loaded and empty car.....	10.3	11.14	12.5	12.7	14
15 Average distance of haul, per ton of freight..... miles	277.6	297.9	250	241	15
16 Gross earnings, per ton..... cents	262	268	217.75	207.02	16
17 Gross earnings, per ton, per mile hauled..... cents	.944	.9	.871	.859	17
18 Gross freight earnings, per train mile..... cents	312.08	317.34	338	364	18
19 Gross freight earnings, per car mile..... cents	9.94	10.204	11.057	11.054	19
20 Percentage of freight expenses to earnings.....					20
21 Principal articles of freight and percentage of tonnage from each.....					21

a Report not clear on this point.

b Exclusive of helping engine mileage amounting to 230 in 1901 and 273 in 1902.

c Exclusive of helping engine mileage amounting to 59 in both 1901 and 1902.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.....	UNION PACIFIC.		SOUTHERN PACIFIC.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	5,580	5,927	1 8,623	8,659	1
2 Mileage owned, leased and controlled by ownership of Stock.....	a 5,651	a 5,930	2 c 9,017	c 9,052	2
3 Average mileage operated.....	b 5,543	5,711	3 8,655	8,757	3
4 Mileage ballasted.....	1,604	2,103	4 4,623	4,651	4
5 Mileage of various kinds of ballast.....	1,301.....Gravel.....1,737 133.....Burnt Clay.....190 111.....Cinder.....111 37.....Crushed Stone.....43		5 { 3,440.....Full ballast.....3,662 1,183.....Partial ballast.....989 }		5
6 Mileage of second, third and fourth main tracks.....	77	77	6 107	119	6
7 Mileage of yard and side tracks.....	1,339	1,404	7 2,105	2,257	7
8 Number of ties renewed in track, per mile.....	479	317	8 335	344	8
9 Mileage of various weight rails.....	.....56-60 lbs. per yd.....2,015 .....70-80 lbs. per yd.....2,844 .....85-90 lbs. per yd.....64		9 { 1,812.....50 lbs. per yd.....1,851 3,230.....60-61.5 lbs. per yd.....2,991 1,984.....75-76 lbs. per yd.....1,986 185.....80 lbs. per yd.....532 }		9
10 Number of Locomotives owned, per mile.....	.152	.138	10 .15	.159	10
11 Average tractive power of Locomotives..... pounds		23,405	11		11
12 Number of Freight Cars owned, per milc.....	4,06	3,69	12 4.13	4.54	12
13 Average capacity of Freight Cars..... pounds	52,600	54,440	13 53,760	54,540	13
14 Number of Passenger Cars owned, per mile.....	.128	.102	14 .116	.153	14
15 Aggregate length of wooden bridges.....feet			15 34,178	33,045	15
16 Aggregate length of wooden trestles.....feet			16 964,185	939,158	16

a Also 1,013 miles of river and ocean lines in 1901 and 1,035 miles in 1902.

b The 1901 report is analyzed just as the company provided it in 1901, and not as it is presented with the 1902 report, altered somewhat as to form.

c Also 5,376 miles of river and ocean lines.

# ANALYSIS OF RAILROAD REPORTS. Statistics of—Assets and Liabilities—Income and Expenses.

23

Name of Railroad.....	† UNION PACIFIC.		† SOUTHERN PACIFIC.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>ASSETS AND LIABILITIES.</b>					
1 Stocks outstanding, per mile.....	36,377	35,660	1 22,859	22,592	1
2 Bonds outstanding, per mile.....	a 44,920	a 43,442	2 43,151	42,529	2
3 Total Stocks and Bonds, per mile.....	81,297	79,102	3 66,010	65,121	3
4 Various Stocks and Bonds in Treasury, per mile.....	b 25,573	b 24,776	4 b.....	b.....	4
5 Fixed Charges, including Taxes, per mile.....	c 1,600	2,344	5 2,505	2,481	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	20.4	28.7	6 29.6	27.5	6
7 Charges ahead of Common Stock, per mile.....	2,569	3,041	7 2,505	2,481	7
8 Amount of Common Stock outstanding, per mile.....	18,407	18,221	8 22,859	22,592	8
9 Total Current Assets.....	d.....	13,047,157	9 13,435,497	7,352,689	9
10 Total Current Liabilities.....	d 25,779,808	j 41,416,540	10 13,049,637	14,828,272	10
11 Total Surplus.....	15,844,966	21,361,692	11 g 10,935,343	g 10,176,309	11
12 Total Surplus, per mile.....	2,859	3,740	12 1,263	1,162	12
13 Reserve Funds, for Betterments, per mile.....	13	13	13 32	5	13
<b>INCOME AND EXPENSES.</b>					
14 Gross Earnings, per mile.....	e 7,702	e 8,167	14 e 8,453	e 9,013	14
15 Percentage of Gross Earnings to Capital.....	9.7	10.3	15 12.9	13.8	15
16 Expenses, per mile.....	e 4,060	e 4,027	16 e 5,314	e 5,824	16
17 Percentage of Expenses to Gross Earnings.....	52.7	49.9	17 62.9	64.63	17
18 Net Earnings, per mile.....	3,642	4,090	18 3,139	3,189	18
19 Additional Miscellaneous Income, per mile.....	c-h 582	h 793	19 h 559	h 496	19
20 Expenses for Maintenance of Way and Structure, per mile.....	975	1,042	20 1,176	1,381	20
21 Expenses for Maintenance of Equipment, per mile.....	805	800	21 902	1,042	21
22 Percentage of Gross Earnings for Maintenance.....	22.1	22.5	22 24.4	26.9	22
23 Percentage of Expenses for Maintenance.....	42.3	45.2	23 39.1	41.6	23
24 Expenses for Conducting Transportation, per mile.....	2,088	2,016	24 3,000	3,207	24
25 General Expenses, per mile.....	191	188	25 236	194	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	29.6	27.4	26 38.3	37.7	26
27 Surplus Earnings, per mile.....	2,354	e 2,189	27 i 399	h 114	27
28 Percentage of Gross Earnings for Surplus.....	30.6	26.8	28 4.7	1.4	28
29 Betterments charged to Reserve Funds, per mile.....		113	29		29
<p>a Including bonds convertible into common stock, \$16,951 per mile in 1901; \$16,101 in 1902.</p> <p>b Probably at cost for Union Pacific. Union Pacific owns also (1902) 5,241,778 acres of land. The average price received was \$1.73 per acre for land sold in 1902. Southern Pacific owns 14,908,288 acres. The average price received per acre in 1902 was \$5.81. Union Pacific credits income from land sales to capital account; Southern Pacific partly to capital account and partly to income account.</p> <p>c Fixed charges in 1901 include charges on Union Pacific bonds held in the treasury. This sum is offset in the receipts of "Miscellaneous Income".</p> <p>d Balance of current liabilities over current assets.</p> <p>† Union Pacific owns (1902) \$90,000,000 par value of Southern Pacific stock.</p> <p>e Gross receipts and expenses of water lines are deducted.</p> <p>f After deducting \$271 per mile appropriated in 1901 for betterments; \$950 in 1902.</p> <p>g Not including surplus held by the proprietary companies, amounting to \$14,064,894 in 1901, and \$58,707,857 in 1902.</p> <p>h "Miscellaneous Income" includes net surplus of water lines.</p> <p>i After deducting \$794 per mile for betterments.</p> <p>j The excess of current liabilities has been provided for since the close of the fiscal year, by the issue \$31,000,000 of Oregon Short Line 4½ bonds.</p> <p>k Deficit after deducting \$1,317 per mile for betterments.</p>					

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	UNION PACIFIC.		SOUTHERN PACIFIC.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>Year ending.....</b>					
<b>MAINTENANCE EXPENSES.</b>					
1 Maintenance of Way and Structure, per ton mile.....cents	.172	.139	1 .209	.244	1
2 Maintenance of Equipment, per ton mile.....cents	.112	.106	2 .16	.184	2
3 Maintenance of Passenger Cars, per car.....	732	911	3 780	771	3
4 Maintenance of Freight Cars, per car.....	55	62	4 61	70	4
5 Maintenance of Locomotives, per locomotive.....	2,583	2,704	5 2,439	2,918	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.975	1.309	6 1.63	1.508	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.43	.462	7 .583	.677	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	6.38	8.066	8 6.31	7.82	8
<b>PASSENGER TRAFFIC.</b>					
9 Number of passengers carried, per mile.....	584	595	9 3,168	1,379	9
10 Passenger miles, per mile.....	61,433	70,130	10 a 90,925	a 105,907	10
11 Passenger train mileage, per mile.....	1,563	1,547	11 1,526	1,644	11
12 Passenger car mileage, per mile.....	9,612	9,806	12 9,638	10,488	12
13 Passenger car mileage, per car.....	75,094	69,602	13 47,832	51,121	13
14 Average number of cars, per passenger train.....	6.2	6.34	14 6.13	6.23	14
15 Average number of passengers, per passenger train.....	39.2	45.33	15 58.09	63.05	15
16 Average number of passengers, per car.....	6.3	7.9	16 9.47	10.12	16
17 Average distance travelled, per passenger.....miles	105.2	117.84	17 68.43	76.78	17
18 Gross earnings, per passenger.....cents	244.06	265	18 156	169	18
19 Gross earnings, per passenger, per mile travelled.....cents	2.32	2.257	19 2.277	2.201	19
20 Gross passenger earnings, per train mile.....cents	120.35	131	20 156	163	20
21 Gross passenger earnings, per car mile.....cents	19.11	20.66	21 25.4	26.2	21
22 Percentage of passenger expenses to earnings.....			22		22

a Ferry and suburban passengers are excluded in all the statistics of passenger traffic.

## Statistics of Freight Traffic.

Name of Railroad.....	UNION PACIFIC.		SOUTHERN PACIFIC.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending .....					
1 Number of revenue tons carried, per mile .....	1,757	1,504	1,625	1,797	1
2 Revenue ton miles, per mile.....	568,303	c 751,097	563,057	566,130	2
3 Freight train mileage, per mile.....	1,883	1,798	b 2,194	b 2,205	3
4 Locomotive mileage, per mile.....	4,417	4,100	5,218	5,392	4
5 Freight car mileage, per mile.....	51,965	54,316	52,602	54,286	5
6 Locomotive mileage, per locomotive .....	40,473	33,526	38,122	37,662	6
7 Freight car mileage, per car.....	a 12,800	13,429	10,478	10,363	7
8 Freight car mileage, per car, per day.....	a 35.1	36.8	28.7	28.4	8
9 Average number of all freight cars, per freight train.....	27.6	30.2	24.37	25.02	9
10 Average number of empty freight cars, per freight train.....	8.3	8.8	6.8	7.39	10
11 Percentage of loaded car mileage to total car mileage.....	70	70.96	71.97	70.44	11
12 Average revenue tons, per freight train.....	301.8	c 417.73	256.6	256.7	12
13 Average revenue tons, per loaded car.....	15.6	c 19.49	14.6	14.56	13
14 Average revenue tons, per loaded and empty car.....	11	c 13.83	10.5	10.26	14
15 Average distance of haul, per ton of freight .....	323.5	c 363.72	346.5	315	15
16 Gross earnings, per ton..... cents	322.85	396	344	322	16
17 Gross earnings, per ton, per mile hauled..... cents	.998	1.089	1.001	1.021	17
18 Gross freight earnings, per train mile..... cents	301.15	417.73	255.698	273.617	18
19 Gross freight earnings, per car mile..... cents	10.91	13.83	10.49	10.93	19
20 Percentage of freight expenses to earnings.....					20
21 Principal articles of freight and percentage of tonnage from each.....			23 ..Agricultural Products....28		21
			25.2 .....Manufactures.....27.4		
			11.2 .....Lumber.....14.8		

a Report not clear on this point.

b Exclusive of light and helping engine mileage amounting to 433 in 1901 and 439 in 1902.

c These five items are based upon the total freight carried including company freight. The annual report for 1902 does not separate company freight from revenue freight in these items.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad .....	ATCHISON-TOPEKA AND SANTA FE.		ST. LOUIS AND SAN FRANCISCO.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	7,755	7,822	1 1,902	3,286	1
2 Mileage owned, leased and controlled by ownership of Stock .....	8,160	8,227	2 1,915	3,414	2
3 Average mileage operated.....	7,807	7,855	3 1,687	3,252	3
4 Mileage ballasted .....			4	1,838	4
5 Mileage of various kinds of ballast. ....			5	Gravel and Chats..... 878	5
				Rock..... 650	
				Cinders..... 208	
				Slag..... 102	
6 Mileage of second, third and fourth main tracks.....	80	80	6	a 26	6
7 Mileage of yard side tracks.....	1,731	1,731	7 300	787	7
8 Number of ties renewed in track, per mile.....			8 102	392	8
9 Mileage of various weight rails.....	56 to 75 lbs. per yd.		9	52 to 85 lbs. per yd.	9
10 Number of Locomotives owned, per mile.....	.15	.167	10 .146	.157	10
11 Average tractive power of Locomotives .... pounds			11	17,200	11
12 Number of Freight Cars owned, per mile .....	3.74	4.35	12 3.7	5.2	12
13 Average capacity of Freight Cars..... pounds			13 47,020	50,510	13
14 Number of Passenger Cars owned, per mile .....	.092	.099	14 .098	.105	14

a Excluding 38 miles of double tracking now being completed.

b Exclusive of the mileage of the Chicago and Eastern Illinois, control of which was acquired in August, 1902, after the close of the fiscal year.

## ANALYSIS OF RAILROAD REPORTS.

27

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	ATCHISON, TOPEKA AND SANTA FE.		ST. LOUIS AND SAN FRANCISCO.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	27,684	28,797	1 27,610	27,336	1
2 Bonds outstanding, per mile.....	25,495	28,762	2 27,350	34,018	2
3 Total Stocks and Bonds, per mile.....	53,179	57,559	3 54,960	61,354	3
4 Various Stocks and Bonds in Treasury, per mile.....	a 74	a 45	4 c 16	c 14	4
5 Fixed Charges, including Taxes, per mile.....	1,290	1,375	5 1,559	1,866	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	18.5	18.3	6 25.8	28.1	6
7 Charges ahead of Common Stock, per mile.....	2,021	2,102	7 2,016	2,114	7
8 Amount of Common Stock outstanding, per mile.....	13,060	12,988	8 16,187	8,397	8
9 Total Current Assets.....	15,526,642	27,308,014	9 2,490,095	4,363,088	9
10 Total Current Liabilities.....	9,172,882	12,203,507	10 2,101,534	5,639,145	10
11 Total Surplus.....	13,082,740	16,027,415	11 1,910,669	3,301,670	11
12 Total Surplus, per mile.....	1,676	2,040	12 1,133	1,015	12
13 Reserve Funds, for Betterments, per mile.....	423	120	13 262	67	13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	6,977	7,528	14 6,032	6,648	14
15 Percentage of Gross Earnings to Capital.....	13.1	13.1	15 11	10.8	15
16 Expenses, per mile.....	4,132	4,317	16 3,466	4,142	16
17 Percentage of Expenses to Gross Earnings.....	59.2	57.2	17 57.45	62.31	17
18 Net Earnings, per mile.....	2,845	3,211	18 2,566	2,506	18
19 Additional Miscellaneous Income, per mile.....	43	145	19 66	61	19
20 Expenses for Maintenance of Way and Structure, per mile.....	814	782	20 781	916	20
21 Expenses for Maintenance of Equipment, per mile.....	820	1,001	21 567	680	21
22 Percentage of Gross Earnings for Maintenance.....	23.3	23.7	22 22.34	24.01	22
23 Percentage of Expenses for Maintenance.....	39.3	41.4	23 38.9	38.5	23
24 Expenses for Conducting Transportation, per mile.....	2,208	2,338	24 1,938	2,352	24
25 General Expenses, per mile.....	300	186	25 179	194	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	35.9	33.5	26 35.11	38.3	26
27 Surplus Earnings, per mile.....	1,598	1,981	27 2,960	700	27
28 Percentage of Gross Earnings for Surplus.....	22.9	26.3	28 15.9	10.5	28
29 Betterments charged to Reserve Funds, per mile.....			29		29

a At estimated value.

b Including \$115 per mile appropriated for betterments.

c Book value.

d After deducting \$107 per mile for betterments.

e There are also bonds amounting to \$1,115 per mile guaranteed by the Kansas City, Fort Scott and Memphis Ry., which is a part of this system.



## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	ATCHISON, TOPEKA AND SANTA FE.		ST. LOUIS AND SAN FRANCISCO.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile .....	.164	.145	1 .192	.182	1
2 Maintenance of Equipment, per ton mile.....	.165	.186	2 .14	.135	2
3 Maintenance of Passenger Cars, per car.....	728	829	3 751	804	3
4 Maintenance of Freight Cars, per car.....	79	86	4 67	54	4
5 Maintenance of Locomotives, per locomotive .....	2,858	3,156	5 1,487	1,751	5
6 Maintenance of Passenger Cars, per car, per mile run..... cents	.786	.862	6 .905	1.051	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.537	.663	7 .835	.539	7
8 Maintenance of Locomotives, per locomotive, per mile run .....	8.2	9.1	8 4.75	5.13	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile .....	726	812	9 1,315	1,131	9
10 Passenger miles, per mile.....	65,843	77,361	10 60,441	56,961	10
11 Passenger train mileage, per mile.....	1,437	1,577	11 1,627	1,643	11
12 Passenger car mileage, per mile .....	8,507	9,575	12 8,125	8,034	12
13 Passenger car mileage, per car.....	92,631	96,176	13 83,006	76,514	13
14 Average number of cars, per passenger train.....	5.9	6.07	14 5	5	14
15 Average number of passengers, per passenger train .....	45.8	49.1	15 37.14	34.66	15
16 Average number of passengers, per car.....	7.8	8.1	16 7.43	6.93	16
17 Average distance travelled, per passenger.....miles	90.74	95.26	17 45.96	50.36	17
18 Gross earnings, per passenger .....	206.16	210.72	18 96.6	115.64	18
19 Gross earnings, per passenger, per mile travelled .....	2.272	2.212	19 2.102	2.297	19
20 Gross passenger earnings, per train mile .....	126	128	20 102.2	101.71	20
21 Gross passenger earnings, per car mile.....	21.356	21.09	21 20.45	20.34	21
22 Percentage of passenger expenses to earnings.....			22		22



## ANALYSIS OF RAILROAD REPORTS.

29

## Statistics of Freight Traffic.

Name of Railroad.....	ATCHISON, TOPEKA AND SANTA FE.		ST. LOUIS AND SAN FRANCISCO.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Number of revenue tons carried, per mile.....	1,423	1,476	1 2,075	2,789	1
2 Revenue ton miles, per mile.....	196,579	538,731	2 106,322	503,499	2
3 Freight train mileage, per mile.....	2,106	2,177	3 3,940	2,694	3
4 Locomotive mileage, per mile.....	1,993	5,099	4 4,551	5,310	4
5 Freight car mileage, per mile.....	55,066	56,509	5 11,189	52,231	5
6 Locomotive mileage, per locomotive.....	33,204	30,530	6 31,211	33,815	6
7 Freight car mileage, per car.....	a 14,708	a 12,978	7 a 8,028	a 10,027	7
8 Freight car mileage, per car, per day.....	a 40.3	a 35.6	8 a 22	a 27.5	8
9 Average number of all freight cars, per freight train.....	26	25.9	9 20.58	19.38	9
10 Average number of empty freight cars, per freight train.....	7.4	7.8	10 6.77	6.74	10
11 Percentage of loaded car mileage to total car mileage.....	71.6	69.7	11 67.1	65.2	11
12 Average revenue tons, per freight train.....	242.67	247.51	12 187.95	186.91	12
13 Average revenue tons, per loaded car.....	12.6	13.68	13 13.61	14.78	13
14 Average revenue tons, per loaded and empty car.....	9.33	9.56	14 9.13	9.64	14
15 Average distance of haul, per ton of freight..... miles	348.86	364.93	15 195.83	180.57	15
16 Gross earnings, per ton..... cents	351.3	360.55	16 206.94	172.09	16
17 Gross earnings, per ton, per mile hauled..... cents	1.007	.988	17 1.057	.953	17
18 Gross freight earnings, per train mile..... cents	244	253	18 198.62	178.13	18
19 Gross freight earnings, per car mile..... cents	9.385	9.77	19 9.65	9.19	19
20 Percentage of freight expenses to earnings.....			20		20
21 Principal articles of freight and percentage of tonnage from each.....	30.9.....b Minerals.....32.2 18.8.....c Grain.....13.3 16.4.....Manufactures.....19.9		31 .....Bituminous Coal....35.1 13.3 .....Grain and Flour.... 9.3 19.17.....Manufactures.....15.45 10.3 .....Lumber.....14.48		21

a Report not clear on this point.

b Mainly bituminous coal.

c Mainly wheat.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.....	DENVER AND RIO GRANDE.		RIO GRANDE WESTERN.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	c JUNE 30, 1902.	
1 Mileage owned. ....	1,629	2,297	1 618	.....	1
2 Mileage owned, leased and controlled by ownership of Stock.....	a 1,722	b 2,390	2 672	.....	2
3 Average mileage operated .....	1,668	c 2,317	3 662	.....	3
4 Mileage ballasted.....	.....	.....	4	.....	4
5 Mileage of various kinds of ballast.....	.....	.....	5	.....	5
6 Mileage of second, third and fourth main tracks .....	36	36	6 9	.....	6
7 Mileage of yard and side tracks .....	318	318	7 108	.....	7
8 Number of ties renewed in track, per mile .....	.....	.....	8	.....	8
9 Mileage of various weight rails .....	268.....85 lbs. per yd.....310 Balance 30 to 80 lbs. per yd.	.....	9 65 to 75 lbs. per yd.	.....	9
10 Number of Locomotives owned, per mile .....	.195	.192	10 .142	.....	10
11 Average tractive power of Locomotives .....	..... pounds	.....	11	.....	11
12 Number of Freight Cars owned, per mile .....	5.08	5.695	12 2.3	.....	12
13 Average capacity of Freight Cars .....	..... pounds	.....	13	.....	13
14 Number of Passenger Cars owned, per mile .....	.136	.14	14 .112	.....	14

a Including 912 miles of narrow gauge road.

b Including 920 miles of narrow gauge road.

c The Denver and Rio Grande and the Rio Grande Western were operated separately in 1901 and their separate reports are here analyzed. In 1902 their operations were consolidated, and one report covering the enlarged Denver and Rio Grande system was furnished. That report is here presented.

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	DENVER AND RIO GRANDE.		RIO GRANDE WESTERN.	
	JUNE 30, 1901.	c JUNE 30, 1902.	JUNE 30, 1901.	c JUNE 30, 1902.
<b>ASSETS AND LIABILITIES.</b>				
1 Stocks outstanding, per mile.....	36,960	35,106	1 26,435	1
2 Bonds outstanding, per mile.....	25,911	31,156	2 38,066	2
3 Total Stocks and Bonds, per mile.....	62,871	66,262	3 64,501	3
4 Various Stocks and Bonds in Treasury, per mile.....	a 1,430	a 1,000	4 a 440	4
5 Fixed Charges, including Taxes, per mile.....	1,431	1,563	5 1,469	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	20.8	21.5	6 19.8	6
7 Charges ahead of Common Stock, per mile.....	2,140	2,509	7 2,035	7
8 Amount of Common Stock outstanding, per mile.....	23,782	16,191	8 15,106	8
9 Total Current Assets.....	2,060,701	5,288,435	9 2,313,787	9
10 Total Current Liabilities.....	2,650,684	4,689,790	10 806,246	10
11 Total Surplus.....	2,707,223	3,377,643	11 415,178	11
12 Total Surplus, per mile.....	1,623	1,440	12 637	12
13 Reserve Funds, for Betterments, per mile.....	173	212	13 371	13
<b>INCOME AND EXPENSES.</b>				
14 Gross Earnings, per mile.....	6,866	7,259	14 7,410	14
15 Percentage of Gross Earnings to Capital.....	10.9	10.9	15 11.5	15
16 Expenses, per mile.....	4,271	4,402	16 4,867	16
17 Percentage of Expenses to Gross Earnings.....	62.2	60.64	17 65.68	17
18 Net Earnings, per mile.....	2,595	2,857	18 2,543	18
19 Additional Miscellaneous Income, per mile.....	67	71	19 76	19
20 Expenses for Maintenance of Way and Structure, per mile.....	929	1,042	20 1,259	20
21 Expenses for Maintenance of Equipment, per mile.....	652	732	21 950	21
22 Percentage of Gross Earnings for Maintenance.....	23	24.4	22 29.8	22
23 Percentage of Expenses for Maintenance.....	37	40.3	23 45.4	23
24 Expenses for Conducting Transportation, per mile.....	2,488	2,423	24 2,375	24
25 General Expenses, per mile.....	202	201	25 293	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	39.2	36.1	26 36	26
27 Surplus Earnings, per mile.....	b 1,147	b 1,100	27 1,151	27
28 Percentage of Gross Earnings for Surplus.....	16.7	15.1	28 15.5	28
29 Betterments charged to Reserve Funds, per mile.....	12	44	29	29

a Book value.

b After deducting \$84 per mile, appropriated for Betterment fund in 1901 and \$364 per mile in 1902.

c See note c on page 30, opposite.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	DENVER AND RIO GRANDE.		RIO GRANDE WESTERN.		
Year ending.....	JUNE 30, 1901.	a JUNE 30, 1902.	JUNE 30, 1901.	a JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents		.245	1	.247	1
2 Maintenance of Equipment, per ton mile.....cents		.172	2	.185	2
3 Maintenance of Passenger Cars, per car.....	404	439	3	805	3
4 Maintenance of Freight Cars, per car.....	54	46	4	96	4
5 Maintenance of Locomotives, per locomotive.....	1,336	1,651	5	3,133	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.709	.611	6	.967	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.614	.604	7	.513	7
8 Maintenance of Locomotives, per locomotive, per mile run... cents	3.81	5.27	8	8.38	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	465	578	9	693	9
10 Passenger miles, per mile.....		76,601	10	76,980	10
11 Passenger train mileage, per mile.....	1,401	1,514	11	1,560	11
12 Passenger car mileage, per mile.....	7,742	8,887	12	9,307	12
13 Passenger car mileage, per car.....	56,976	61,575	13	83,264	13
14 Average number of cars, per passenger train.....	5.5	5.87	14	5.96	14
15 Average number of passengers, per passenger train.....		50.59	15	49.34	15
16 Average number of passengers, per car.....		8.45	16	8.3	16
17 Average distance travelled, per passenger.....miles		132.63	17	111.09	17
18 Gross earnings, per passenger.....cents	266.09	271.59	18	232.18	18
19 Gross earnings, per passenger, per mile travelled.....cents		2.05	19	2.09	19
20 Gross passenger earnings, per train mile.....cents	126.8	126.58	20	114.12	20
21 Gross passenger earnings, per car mile.....cents	23.05	21.56	21	19.15	21
22 Percentage of passenger expenses to earnings.....			22		22

a See note c on page 30.

## Statistics of Freight Traffic.

Name of Railroad.....	DENVER AND RIO GRANDE.		RIO GRANDE WESTERN.		
	JUNE 30, 1901.	6 JUNE 30, 1902.	JUNE 30, 1901.	6 JUNE 30, 1902.	
1 Number of revenue tons carried, per mile.....	2,590	2,772	1 2,928	.....	1
2 Revenue ton miles, per mile.....	.....	125,228	2 509,878	.....	2
3 Freight train mileage, per mile.....	2,365	2,132	3 2,258	.....	3
4 Locomotive mileage, per mile.....	6,342	5,651	4 5,309	.....	4
5 Freight car mileage, per mile.....	11,685	13,385	5 13,074	.....	5
6 Locomotive mileage, per locomotive.....	32,449	29,123	6 37,338	.....	6
7 Freight car mileage, per car.....	a 8,793	a 7,618	7 a 18,723	.....	7
8 Freight car mileage, per car, per day.....	a 24	a 20.9	8 a 51.6	.....	8
9 Average number of all freight cars, per freight train.....	18.9	20.35	9 19.08	.....	9
10 Average number of empty freight cars, per freight train.....	6.7	6.9	10 5.9	.....	10
11 Percentage of loaded car mileage to total car mileage.....	67	66	11 69.1	.....	11
12 Average revenue tons, per freight train.....	.....	199.18	12 225.8	.....	12
13 Average revenue tons, per loaded car.....	.....	14.83	13 17.11	.....	13
14 Average revenue tons, per loaded and empty car.....	.....	9.8	14 11.84	.....	14
15 Average distance of haul, per ton of freight.....miles	.....	153.37	15 174.46	.....	15
16 Gross earnings, per ton.....cents	196.44	187.11	16 188.09	.....	16
17 Gross earnings, per ton, per mile hauled.....cents	.....	1.32	17 1.08	.....	17
18 Gross freight earnings, per train mile.....cents	215.15	243	18 241	.....	18
19 Gross freight earnings, per car mile.....cents	11.38	11.93	19 12.78	.....	19
20 Percentage of freight expenses to earnings.....	.....	.....	20 .....	.....	20
21 Principal articles of freight and percentage of tonnage from each.....	.....		21 { .....	.....	21

a Report not clear on this point.

b See note c on page 30.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.....	MISSOURI PACIFIC.		TEXAS AND PACIFIC.		
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
1 Mileage owned.....	5,455	5,455	1,477	1,591	1
2 Mileage owned, leased and controlled by ownership of Stock.....	5,541	5,567	1,570	1,684	2
3 Average mileage operated.....	5,541	5,555	1,527	1,634	3
4 Mileage ballasted.....	1,877	2,040	453	453	4
5 Mileage of various kinds of ballast.....	530.....Gravel.....	618	5	.....Cinder.....	233
	553.....Cinder.....	578		.....Gravel.....	145
	430.....Zinc Tailings.....	413		.....Rock.....	85
	361.....Rock.....	398			
6 Mileage of second, third and fourth main tracks.....					6
7 Mileage of yard and side tracks.....	1,076	1,176	327	362	7
8 Number of ties renewed in track, per mile.....	455	484	447	464	8
9 Mileage of various weight rails.....	.....52 lbs. per yd.....	468	9	390.....75 lbs per yd.....	480
	.....56 " ".....	2,484		139.....63 " ".....	127
	.....60-63 " ".....	1,139		985.....56 " ".....	973
	.....75 " ".....	1,199			
10 Number of Locomotives owned, per mile.....	.093	.096	.152	.169	10
11 Average tractive power of Locomotives.....pounds		21,010		17,283	11
12 Number of Freight Cars owned, per mile.....	4,765	6.08	3,816	3.7	12
13 Average capacity of Freight Cars.....pounds		50,000		55,656	13
14 Number of Passenger Cars owned, per mile.....	.098	.105	.093	.096	14
15 Aggregate mileage of curved track.....			241	264	15
16 Number of curves in track.....			814	905	16
17 Mileage of ascending track.....			993	1,038	17
18 Average ascent per mile of ascending track.....feet			107	103	18
19 Aggregate length of wooden bridges.....feet			1,860	1,708	19

## ANALYSIS OF RAILROAD REPORTS.

35

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	MISSOURI PACIFIC.		TEXAS AND PACIFIC.	
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
<b>ASSETS AND LIABILITIES.</b>				
1 Stocks outstanding, per mile.....	9,101	13,754	1 25,357	23,721 1
2 Bonds outstanding, per mile.....	34,747	23,279	2 c 34,313	c 32,876 2
3 Total Stocks and Bonds, per mile.....	33,848	37,033	3 59,670	56,597 3
4 Various Stocks and Bonds in Treasury, per mile.....	a 22,863	a 28,521	4 811	186 4
5 Fixed Charges including Taxes, per mile.....	1,418	1,386	5 1,026	1,031 5
6 Percentage of Fixed Charges and Taxes to Earnings.....	24.4	21	6 16	14.3 6
7 Charges ahead of Common Stock, per mile.....	1,418	1,386	7 1,844	1,795 7
8 Amount of Common Stock outstanding, per mile.....	9,101	13,754	8 25,357	23,721 8
9 Total Current Assets.....	7,193,275	7,030,458	9 1,965,013	3,240,700 9
10 Total Current Liabilities.....	5,755,680	8,450,503	10 1,428,419	1,764,529 10
11 Total Surplus.....	7,764,628	8,489,020	11 2,662,982	3,220,439 11
12 Total Surplus, per mile.....	1,401	1,529	12 1,744	1,971 12
13 Reserve Funds, for Betterments, per mile.....		180	13	
<b>INCOME AND EXPENSES.</b>				
14 Gross Earnings, per mile.....	5,825	6,600	14 6,385	7,203 14
15 Percentage of Gross Earnings to Capital.....	17	17.9	15 11	13 15
16 Expenses, per mile.....	3,825	4,252	16 4,310	4,917 16
17 Percentage of Expenses to Gross Earnings.....	65.7	64.4	17 67.5	68.3 17
18 Net Earnings, per mile.....	2,000	2,348	18 2,075	2,286 18
19 Additional Miscellaneous Income, per mile.....	247	445	19 124	222 19
20 Expenses for Maintenance of Way and Structure, per mile.....	b	b	20 989	1,104 20
21 Expenses for Maintenance of Equipment, per mile.....	b	b	21 735	852 21
22 Percentage of Gross Earnings for Maintenance.....	b	b	22 27	27 22
23 Percentage of Expenses for Maintenance.....	b	b	23 40	39.8 23
24 Expenses for Conducting Transportation, per mile.....	b	b	24 2,404	2,771 24
25 General Expenses, per mile.....	128	147	25 181	190 25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	b	b	26 40.5	41 26
27 Surplus Earnings, per mile.....	688	1,346	27 d 745	d 910 27
28 Percentage of Gross Earnings for Surplus.....	12	20	28 11.7	12.6 28
29 Betterments charged to Reserve Funds, per mile.....			29	

a At par value. Cost to company was about one-half of the par value.

b Missouri Pacific does not classify expenses as the Interstate Commerce Commission directs.

c Includes income bonds amounting to \$16,358 per mile in 1900 and \$15,294 per mile in 1901.

d After deducting \$416 per mile, spent for betterments in 1900, and \$567 per mile in 1901.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	MISSOURI PACIFIC.		TEXAS AND PACIFIC.		
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents			1 .225	.204	1
2 Maintenance of Equipment, per ton mile.....cents			2 .167	.158	2
3 Maintenance of Passenger Cars, per car.....	543	505	3 949	1,127	3
4 Maintenance of Freight Cars, per car.....	55	37	4 76	77	4
5 Maintenance of Locomotives, per locomotive.....	2,622	2,779	5 1,624	2,399	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.71	.73	6 1.21	1.49	6
7 Maintenance of Freight Cars, per car, per mile run..... cents	.5	.36	7 .78	.79	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	5.8	5.98	8 4.86	6.3	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	958	914	9 987	1,126	9
10 Passenger miles, per mile.....	45,295	48,676	10 56,319	62,400	10
11 Passenger train mileage, per mile.....	1,335	1,446	11 1,441	1,415	11
12 Passenger car mileage, per mile.....	6,839	7,354	12 7,335	7,342	12
13 Passenger car mileage, per car.....	79,935	80,154	13 78,319	75,862	13
14 Average number of cars, per passenger train.....	5.1	5.1	14 4.99	5.1	14
15 Average number of passengers, per passenger train.....	33.8	33.7	15 39.09	44.1	15
16 Average number of passengers, per car.....	6.6	6.6	16 7.7	8.5	16
17 Average distance travelled, per passenger.....miles	47.09	53.28	17 57.69	55.43	17
18 Gross earnings, per passenger.....cents	104.47	117.75	18 140.55	138.39	18
19 Gross earnings, per passenger, per mile travelled.....cents	2.22	2.21	19 2.46	2.49	19
20 Gross passenger earnings, per train mile..... cents	100.03	98.6	20 96.22	110.1	20
21 Gross passenger earnings, per car mile.....cents	19.53	19.39	21 18.88	21.24	21
22 Percentage of passenger expenses to earnings.....		73.59	22 78.7	77	22



## Statistics of Freight Traffic.

Name of Railroad.....	MISSOURI PACIFIC.		TEXAS AND PACIFIC.			
Year ending .....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.		
1 Number of revenue tons carried, per mile .....	2,071	2,351	1 1,893	2,331	1	
2 Revenue ton miles, per mile.....	490,533	582,218	2 438,852	543,914	2	
3 Freight train mileage, per mile.....	2,125	2,244	3 2,448	2,767	3	
4 Locomotive mileage, per mile.....	4,359	4,664	4 5,034	5,524	4	
5 Freight car mileage, per mile.....	46,279	50,128	5 51,826	59,846	5	
6 Locomotive mileage, per locomotive ..	46,888	46,478	6 33,421	38,087	6	
7 Freight car mileage, per car.....	11,060	10,256	7 9,855	9,855	7	
8 Freight car mileage, per car, per day.....	30.3	28.1	8 27	27	8	
9 Average number of all freight cars, per freight train.....	21.8	22.3	9 21.1	21.6	9	
10 Average number of empty freight cars, per freight train.....	5.3	5	10 6.3	6.6	10	
11 Percentage of loaded car mileage to total car mileage.....	75.9	77.4	11 70	69	11	
12 Average revenue tons, per freight train.....	230.8	259.4	12 179.3	195.2	12	
13 Average revenue tons, per loaded car.....	14	15	13 12.6	12.99	13	
14 Average revenue tons, per loaded and empty car.....	10.6	11.2	14 8.5	9	14	
15 Average distance of haul, per ton of freight .....miles	236.75	247.66	15 231.77	232.75	15	
16 Gross earnings, per ton.....cents	202.29	204.73	16 237.58	221.39	16	
17 Gross earnings, per ton, per mile hauled.....cents	.854	.825	17 1.03	.95	17	
18 Gross freight earnings, per train mile.....cents	211.37	230.55	18 183.76	185.69	18	
19 Gross freight earnings, per car mile.....cents	9.71	10.32	19 8.68	8.58	19	
20 Percentage of freight expenses to earnings.....		61.89	20 71.5	72.3	20	
21 Principal articles of freight and percentage of tonnage from each	17.2.....Coal.....	17.8	21	22.7.....Manufactures.....	23.5	21
	16.6.....Grain.....	16.3		18 a Agricultural Products.....	17.7	
	13.5.....Lumber.....	13.8		16.1.....Forest Products.....	17.5	
	10.7.....Manufactures.....	11.8		19.1.....Mining Products.....	17.3	
				13.....Grain.....	15.5	
				6.6.....c Cotton.....	5	

a Exclusive of grain.

b Hauling of Cotton furnished 133 $\frac{3}{4}$ % of total freight revenue in 1901, and 16 $\frac{3}{4}$ % in 1900.

## Statistics of Physical Condition.

Name of Railroad.....	FORT WORTH AND DENVER CITY.		COLORADO AND SOUTHERN.		
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Mileage owned.....	454	454	1 1,083	1,062	1
2 Mileage owned, leased and controlled by ownership of Stock.....	454	454	2 1,932	1,911	2
3 Average mileage operated.....	454	454	3 a 1,142	a 1,133	3
4 Mileage ballasted.....	Mostly dirt roadbed.		4		4
5 Mileage of various kinds of ballast.....			5		5
6 Mileage of second, third and fourth main tracks.....			6		6
7 Mileage of yard and side tracks.....	42	49	7 217	217	7
8 Number of ties renewed in track, per mile.....	445	510	8 350	349	8
9 Mileage of various weight rails.....	258 . . . . . 56 lbs. per yd. . . . . 258	107 . . . . . 65 lbs. per yd. . . . . 107	9 45 to 85 lbs. per yd.		9
	88 . . . . . 58 and 60 lbs. per yd. . . . . 88				
10 Number of Locomotives owned, per mile.....	.081	.081	10 .13	.153	10
11 Average tractive power of Locomotives.....pounds			11		11
12 Number of Freight Cars owned, per mile.....	2.32	2.27	12 3.66	4.53	12
13 Average capacity of Freight Cars.....pounds	41,034	43,500	13 45,705	49,865	13
14 Number of Passenger Cars owned, per mile.....	.062	.057	14 .116	.116	14
15 Aggregate length of wooden trestles and bridges.....feet	41,919	37,203	15		15

a Including 350 miles of narrow gauge road in 1901 and 387 miles in 1902.

## ANALYSIS OF RAILROAD REPORTS.

39

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	FORT WORTH AND DENVER CITY.		COLORADO AND SOUTHERN.		
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>ASSETS AND LIABILITIES.</b>					
1 Stocks outstanding, per mile.....	20,550	20,650	1 42,032	41,539	1
2 Bonds outstanding, per mile.....	18,361	18,123	2 15,846	16,806	2
3 Total Stocks and Bonds, per mile.....	39,011	38,773	3 57,878	58,345	3
4 Various Charges and Bonds in Treasury, per mile.....	936	714	4 1,184	1,071	4
5 Fixed Charges, including Taxes, per mile.....	882	1,202	5 815	838	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	22	25	6 19.4	17	6
7 Charges ahead of Common Stock, per mile.....	1,106	1,426	7 1,410	1,438	7
8 Amount of Common Stock outstanding, per mile.....	15,055	15,055	8 27,145	27,361	8
9 Total Current Assets.....	223,185	367,618	9 1,011,890	1,323,516	9
10 Total Current Liabilities.....	224,027	284,865	10 1,082,029	1,515,355	10
11 Total Surplus.....	325,686	369,758	11 435,446	807,205	11
12 Total Surplus, per mile.....	717	814	12 380	714	12
13 Reserve Funds, for Betterments, per mile.....			13 50	99	13
<b>INCOME AND EXPENSES.</b>					
14 Gross Earnings, per mile.....	3,989	4,775	14 4,200	4,926	14
15 Percentage of Gross Earnings to Capital.....	10.2	12.3	15 7.3	8.4	15
16 Expenses, per mile.....	3,135	3,509	16 a 3,073	a 3,570	16
17 Percentage of Expenses to Gross Earnings.....	78.6	73.5	17 a 72.5	a 72.5	17
18 Net Earnings, per mile.....	854	1,266	18 1,127	1,356	18
19 Additional Miscellaneous Income, per mile.....	38	26	19 43	36	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,115	1,180	20 611	840	20
21 Expenses for Maintenance of Equipment, per mile.....	386	469	21 538	650	21
22 Percentage of Gross Earnings for Maintenance.....	37.7	34.5	22 27.8	30.3	22
23 Percentage of Expenses for Maintenance.....	48	47	23 38	41.7	23
24 Expenses for Conducting Transportation, per mile.....	1,489	1,711	24 1,767	1,930	24
25 General Expenses, per mile.....	137	142	25 137	150	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	40.9	38.9	26 45.3	42.3	26
27 Surplus Earnings, per mile.....	8	88	27 355	553	27
28 Percentage of Gross Earnings for Surplus.....	.2	1.8	28 8.5	11.2	28
29 Betterments charged to Reserve Funds, per mile.....			29		29

a Including Rentals and Insurance, items generally included under fixed charges, amounting to only about \$80 per mile.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	FORT WORTH AND DENVER CITY.		COLORADO AND SOUTHERN.		
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	JUNE 30, 1901.		JUNE 30, 1902.
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile .....	cents .461	.318	1	.226	.264 1
2 Maintenance of Equipment, per ton mile.....	cents .183	.131	2	.207	.204 2
3 Maintenance of Passenger Cars, per car.....	1,100	892	3	307	456 3
4 Maintenance of Freight Cars, per car.....	25	39	4	38	53 4
5 Maintenance of Locomotives, per locomotive.....	1,983	2,195	5	2,103	2,168 5
6 Maintenance of Passenger Cars, per car, per mile run.....	cents 1.47	1.053	6	1	1.4 6
7 Maintenance of Freight Cars, per car, per mile run.....	cents .108	.26	7	.508	.751 7
8 Maintenance of Locomotives, per locomotive, per mile run.....	cents 4.27	4.65	8	6.58	6.05 8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	373	490	9	602	735 9
10 Passenger miles, per mile.....	36,309	18,556	10	27,461	33,746 10
11 Passenger train mileage, per mile.....	913	923	11	761	768 11
12 Passenger car mileage, per mile.....	4,607	4,851	12	3,550	3,756 12
13 Passenger car mileage, per car.....	74,701	84,709	13	30,711	32,486 13
14 Average number of cars, per passenger train.....	5.05	5.25	14	4.67	4.89 14
15 Average number of passengers, per passenger train.....	39.67	52.49	15	36.08	43.96 15
16 Average number of passengers, per car.....	7.86	9.99	16	7.73	8.99 16
17 Average distance traveled, per passenger.....	miles 97.13	98.83	17	46	46 17
18 Gross earnings, per passenger.....	cents 291.39	287.37	18	126.086	121.762 18
19 Gross earnings, per passenger, per mile traveled.....	cents 2.167	2.159	19	2.741	2.617 19
20 Gross passenger earnings, per train mile.....	cents 119	153	20	117	137 20
21 Gross passenger earnings, per car mile.....	cents 23.58	29.02	21	25.05	28.02 21
22 Percentage of passenger expenses to earnings.....			22		

## Statistics of Freight Traffic.

Name of Railroad.....	FORT WORTH AND DENVER CITY.		COLORADO AND SOUTHERN.			
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	JUNE 30, 1901.		JUNE 30, 1902.	
1 Number of revenue tons carried, per mile.....	1,251	1,533	1	2,563	3,239	1
2 Revenue ton miles, per mile.....	256,447	320,434	2	269,966	318,319	2
3 Freight train mileage, per mile.....	1,725	1,569	3	1,505	1,691	3
4 Locomotive mileage, per mile.....	3,678	3,693	4	4,073	4,598	4
5 Freight car mileage, per mile.....	32,783	34,446	5	27,396	31,638	5
6 Locomotive mileage, per locomotive.....	15,132	45,314	6	31,430	30,110	6
7 Freight car mileage, per car.....	a14,121	a15,186	7	a7,476	a7,053	7
8 Freight car mileage, per car, per day.....	a39	a42	8	a20.5	a19.3	8
9 Average number of all freight cars, per freight train.....	18.94	21.95	9	18.2	18.7	9
10 Average number of empty freight cars, per freight train.....	4.53	5.97	10	6	6.6	10
11 Percentage of loaded car mileage to total car mileage.....	77.9	72.8	11	67.5	64.7	11
12 Average revenue tons, per freight train.....	118.48	204.32	12	179	188	12
13 Average revenue tons, per loaded car.....	10.07	12.78	13	14.59	15.51	13
14 Average revenue tons, per loaded and empty car.....	7.84	9.31	14	9.85	10.06	14
15 Average distance of haul, per ton of freight..... miles	205	209	15	105	98	15
16 Gross earnings, per ton..... cents	221.21	209.67	16	126.735	107.992	16
17 Gross earnings, per ton, per mile hauled..... cents	1.08	1.003	17	1.207	1.204	17
18 Gross freight earnings, per train mile..... cents	160	205	18	216	226	18
19 Gross freight earnings, per car mile..... cents	8.44	9.33	19	11.87	12.1	19
20 Percentage of freight expense to earnings.....			20			20
21 Principal articles of freight and percentage of tonnage from each.....	15.1.....Lumber.....21.3		21	31.7... Bituminous Coal....28.7		21
	15.4.....Grain.....10.6			19.4.....Ore.....18.6		
	15.2.....Live Stock.....13.2			15.6 Lignite Coal and Coke 20.6		
	11.9.....Coal and Coke...12.7					

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	MISSOURI, KANSAS AND TEXAS.		ST. LOUIS SOUTHWESTERN.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	2,480	2,555	1 1,251	1,251	1
2 Mileage owned, leased and controlled by ownership of Stock.....	2,480	2,555	2 1,293	1,293	2
3 Average mileage operated.....	2,265	2,500	3 1,275	1,293	3
4 Mileage ballasted.....		1,726	4 568	620	4
5 Mileage of various kinds of ballast.....			5 { 409.....Gravel and Sand.....460 104.....Rock.....104 54.....Cinders.....56 }		5
6 Mileage of second, third and fourth main tracks.....			6 .....		6
7 Mileage of yard and side tracks.....	427	427	7 248	267	7
8 Number of ties renewed in track, per mile.....	495	597	8 419	550	8
9 Mileage of various weight rails.....			9 { 114.....35 lbs. per yd. .... 41 1,028.....56 lbs. per yd.....932 104.....75 lbs. per yd.....252 }		9
10 Number of Locomotives owned, per mile.....	.13	.132	10 .099	.114	10
11 Average tractive power of Locomotives.....pounds			11 16,590	18,190	11
12 Number of Freight Cars owned, per mile.....	4,585	4,703	12 4.57	5.19	12
13 Average capacity of Freight Cars.....pounds			13 47,800	49,000	13
14 Number of Passenger Cars owned, per mile.....	.095	.09	14 .087	.093	14

## ANALYSIS OF RAILROAD REPORTS.

43

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	MISSOURI, KANSAS AND TEXAS.		ST. LOUIS SOUTHWESTERN.	
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.
<b>ASSETS AND LIABILITIES.</b>				
1 Stocks outstanding, per mile.....	31,236	32,438	1 28,626	28,035
2 Bonds outstanding, per mile.....	34,087	29,028	2 24,521	28,927
3 Total Stocks and Bonds, per mile.....	65,323	61,466	3 53,147	56,962
4 Various Stocks and Bonds in Treasury, per mile.....	a 209	a 187	4 b 91	c 209
5 Fixed Charges, including Taxes, per mile.....	1,685	1,588	5 1,006	1,125
6 Percentage of Fixed Charges and Taxes to Earnings.....	24.8	24.2	6 17.4	20
7 Charges ahead of Common Stock, per mile.....	1,915	1,796	7 2,104	2,199
8 Amount of Common Stock outstanding, per mile.....	24,406	22,440	8 12,941	12,650
9 Total Current Assets.....	2,150,063	2,284,979	9 2,564,421	7,017,555
10 Total Current Liabilities.....	2,639,858	2,801,083	10 1,258,491	1,117,471
11 Total Surplus.....	2,585,142	1,260,348	11 918,592	1,458,017
12 Total Surplus, per mile.....	1,140	504	12 720	1,128
13 Reserve Funds, for Betterments, per mile.....	250	437	13 1,067	404
<b>INCOME AND EXPENSES.</b>				
14 Gross Earnings, per mile.....	6,800	6,557	14 5,792	5,620
15 Percentage of Gross Earnings to Capital.....	10.4	10.7	15 10.9	9.9
16 Expenses, per mile.....	4,778	4,619	16 3,632	4,001
17 Percentage of Expenses to Gross Earnings.....	70.3	70.4	17 62.7	71.8
18 Net Earnings, per mile.....	2,022	1,938	18 2,160	1,620
19 Additional Miscellaneous Income, per mile.....	17	13	19 64	69
20 Expenses for Maintenance of Way and Structure, per mile.....	1,243	1,058	20 847	1,050
21 Expenses for Maintenance of Equipment, per mile.....	601	599	21 527	634
22 Percentage of Gross Earnings for Maintenance.....	27	25.3	22 23.6	30
23 Percentage of Expenses for Maintenance.....	38.6	35.9	23 37.8	42.1
24 Expenses for Conducting Transportation, per mile.....	2,615	2,650	24 1,960	2,039
25 General Expenses, per mile.....	320	311	25 299	278
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	43.2	45.1	26 38.9	41.2
27 Surplus Earnings, per mile.....	355	364	27 1,219	563
28 Percentage of Gross Earnings for Surplus.....	5.2	5.5	28 21	10
29 Betterments charged to Reserve Funds, per mile.....		169	29 172	720

a Market value.

b Cost to Company.

c Par value.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	MISSOURI, KANSAS AND TEXAS.		ST. LOUIS SOUTHWESTERN.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.		JUNE 30, 1902.
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.216	.189	1	.23	.264
2 Maintenance of Equipment, per ton mile.....cents	.104	.107	2	.143	.159
3 Maintenance of Passenger Cars, per car.....			3	600	690
4 Maintenance of Freight Cars, per car.....			4	43	46
5 Maintenance of Locomotives, per locomotive.....			5	2,030	1,964
6 Maintenance of Passenger Cars, per car, per mile run.....cents			6	1.05	1.18
7 Maintenance of Freight Cars, per car, per mile run.....cents			7	.62	.74
8 Maintenance of Locomotives, per locomotive, per mile run.....cents			8	5.03	5.58
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	915	931	9	1,005	956
10 Passenger miles, per mile.....	51,818	55,609	10	45,459	44,914
11 Passenger train mileage, per mile.....	1,516	1,642	11	1,252	1,247
12 Passenger car mileage, per mile.....	7,469	7,816	12	6,247	6,387
13 Passenger car mileage, per car.....	72,117	73,365	13	63,875	64,240
14 Average number of cars, per passenger train.....	4.93	4.8	14	4.72	4.82
15 Average number of passengers, per passenger train.....	34.17	34	15	36.37	33.74
16 Average number of passengers, per car.....	6.93	7.1	16	7.7	7
17 Average distance travelled, per passenger.....miles	56.66	59.73	17	45.23	46.97
18 Gross earnings, per passenger.....cents	128.3	130.6	18	109.27	110.36
19 Gross earnings, per passenger, per mile travelled.....cents	2.265	2.187	19	2.42	2.35
20 Gross passenger earnings, per train mile.....cents	94.102	89.28	20	105.42	101.91
21 Gross passenger earnings, per car mile.....cents	19.105	18.6	21	22.34	21.14
22 Percentage of passenger expenses to earnings.....			22		



## ANALYSIS OF RAILROAD REPORTS.

45

## Statistics of Freight Traffic.

Name of Railroad.....	MISSOURI, KANSAS AND TEXAS.		ST. LOUIS SOUTHWESTERN.			
Year ending .....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.		JUNE 30, 1902.	
1 Number of revenue tons carried, per mile .....	2,157	2,006	1	1,881	2,000	1
2 Revenue ton miles, per mile .....	576,023	558,684	2	367,571	398,254	2
3 Freight train mileage, per mile.....	2,714	2,707	3	1,751	1,716	3
4 Locomotive mileage, per mile.....			4	3,996	4,012	4
5 Freight car mileage, per mile.....	63,531	62,936	5	37,316	37,044	5
6 Locomotive mileage, per locomotive ..			6	40,359	35,197	6
7 Freight car mileage, per car.....	13,567	12,560	7	7,665	7,665	7
8 Freight car mileage, per car, per day.....	37.17	34.41	8	21	21	8
9 Average number of all freight cars, per freight train.....	23.41	23.25	9	21.31	21.58	9
10 Average number of empty freight cars, per freight train.....	7.27	8.8	10	6.39	6.39	10
11 Percentage of loaded car mileage to total car mileage.....	68.94	62.16	11	70	70.4	11
12 Average revenue tons, per freight train.....	212.2	206.4	12	209.99	232.08	12
13 Average revenue tons, per loaded car.....	13.15	14.3	13	14.08	15.28	13
14 Average revenue tons, per loaded and empty car.....	9.07	8.88	14	9.85	10.8	14
15 Average distance of haul, per ton of freight .....miles	267.1	278.54	15	195.42	199.1	15
16 Gross earnings, per ton.....cents	247.6	251.9	16	235.62	214.81	16
17 Gross earnings, per ton, per mile hauled, .....	.927	.904	17	1.21	1.08	17
18 Gross freight earnings, per train mile. ....cents	196.78	186.66	18	255.78	253.3	18
19 Gross freight earnings, per car mile.....cents	8.41	8.02	19	18.81	11.74	19
20 Percentage of freight expenses to earnings.....			20			20
21 Principal articles of freight and percentage of tonnage from each .....	36.5 ..... Coal ..... 34.5		21	50.2 ..... Lumber ..... 50.4		21
	28.2 ..... Agricultural Products ..... 26.2			15.1 ..... Cotton Products ..... 10.7		
	12.7 ..... Manufactures ..... 13.4			11.3 ..... Other Agric. Products ..... 17.2		

## Statistics of Physical Condition.

Name of Railroad .....	CHICAGO, ROCK ISLAND & PACIFIC.		BURLINGTON, CEDAR RAPIDS & NORTHERN.		
Year ending .....	MARCH 31, 1901.	MARCH 31, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
1 Mileage owned.....	3,178	3,219	1 1,277	1,299	1
2 Mileage owned, leased and controlled by ownership of Stock .....	3,819	3,910	2 1,289	1,311	2
3 Average mileage operated.....	<i>a</i> 3,819	<i>a</i> 3,910	3 1,193	1,288	3
4 Mileage ballasted .....			4		4
5 Mileage of various kinds of ballast.....			5		5
6 Mileage of second, third and fourth main tracks.....	249	282	6		6
7 Mileage of yard side tracks.....	775	813	7 168	168	7
8 Number of ties renewed in track, per mile.....	302	311	8	177	8
9 Mileage of various weight rails.....			9	52 to 80 lbs. per yd.	9
10 Number of Locomotives owned, per mile.....	.150	.161	10 .113	.109	10
11 Average tractive power of Locomotives ..... pounds			11	18,000	11
12 Number of Freight Cars owned, per mile .....	4.75	5.05	12 4.59	4.55	12
13 Average capacity of Freight Cars..... pounds			13 45,360	46,940	13
14 Number of Passenger Cars owned, per mile .....	.115	.121	14 .087	.083	14

*a* Approximate.

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	CHICAGO, ROCK ISLAND & PACIFIC.		BURLINGTON, CEDAR RAPIDS & NORTHERN.	
Year ending.....	MARCH 31, 1901.	MARCH 31, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
<b>ASSETS AND LIABILITIES.</b>				
1 Stocks outstanding, per mile.....	13,072	15,311	1 5,970	5,559 1
2 Bonds outstanding, per mile.....	18,508	17,310	2 13,248	12,848 2
3 Total Stocks and Bonds, per mile.....	31,580	32,621	3 19,218	18,407 3
4 Various Stocks and Bonds in Treasury, per mile.....	1,635	1,581	4 79	481 4
5 Fixed Charges, including Taxes, per mile.....	1,242	1,223	5 792	738 5
6 Percentage of Fixed Charges and Taxes to Earnings.....	18.7	16.8	6 19.5	17.7 6
7 Charges ahead of Common Stock, per mile.....	1,242	1,223	7 792	738 7
8 Amount of Common Stock outstanding, per mile.....	13,072	15,311	8 5,970	5,559 8
9 Total Current Assets.....	8,935,165	20,144,873	9 1,086,046	734,745 9
10 Total Current Liabilities.....	1,911,190	3,032,540	10 315,984	629,465 10
11 Total Surplus.....	10,813,670	15,286,755	11 a 4,821,371	a 5,472,772 11
12 Total Surplus, per mile.....	2,832	3,910	12 4,041	4,249 12
13 Reserve Funds, for Betterments, per mile.....			13	13
<b>INCOME AND EXPENSES.</b>				
14 Gross Earnings, per mile.....	6,641	7,260	14 4,064	4,162 14
15 Percentage of Gross Earnings to Capital.....	21	22.3	15 21.1	22.6 15
16 Expenses, per mile.....	4,248	4,433	16 2,886	2,600 16
17 Percentage of Expenses to Gross Earnings.....	63.96	61.6	17 71	62.5 17
18 Net Earnings, per mile.....	2,393	2,827	18 1,178	1,562 18
19 Additional Miscellaneous Income, per mile.....	184	243	19 219	23 19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,204	1,188	20 1,062	951 20
21 Expenses for Maintenance of Equipment, per mile.....	781	744	21 513	357 21
22 Percentage of Gross Earnings for Maintenance.....	29.9	26.6	22 38.75	31.4 22
23 Percentage of Expenses for Maintenance.....	46.7	24.3	23 51.6	50.3 23
24 Expenses for Conducting Transportation, per mile.....	2,109	2,343	24 1,202	1,192 24
25 General Expenses, per mile.....	155	158	25 109	100 25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	34.1	34.4	26 32.27	31 26
27 Surplus Earnings, per mile.....	1,335	1,847	27 604	847 27
28 Percentage of Gross Earnings for Surplus.....	20.1	25.4	28 14.9	20.4 28
29 Betterments charged to Reserve Funds, per mile.....			29	29

a Not including the amount charged off for betterments—over \$3,000,000 in all.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad .....	CHICAGO, ROCK ISLAND & PACIFIC.		BURLINGTON, CEDAR RAPIDS & NORTHERN.		
Year ending.....	MARCH 31, 1901.	MARCH 31, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile .....	cents .357	.253	1 .439	.392	1
2 Maintenance of Equipment, per ton mile.....	cents .167	.153	2 .212	.147	2
3 Maintenance of Passenger Cars, per car.....	817	847	3 533	479	3
4 Maintenance of Freight Cars, per car.....	76	51	4 25	19	4
5 Maintenance of Locomotives, per locomotive .....	1,642	1,846	5 1,054	1,026	5
6 Maintenance of Passenger Cars, per car, per mile run.....	cents .871	1.025	6 1.058	1.016	6
7 Maintenance of Freight Cars, per car, per mile run.....	cents .699	.462	7 .71	.525	7
8 Maintenance of Locomotives, per locomotive, per mile run .....	cents 4.33	4.96	8 3.50	3.28	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile .....	1,939	2,104	9 934	961	9
10 Passenger miles, per mile .....	77,560	95,221	10 37,120	39,833	10
11 Passenger train mileage, per mile.....	1,815	1,936	11 1,329	1,164	11
12 Passenger car mileage, per mile .....	9,835	10,003	12 4,952	4,657	12
13 Passenger car mileage, per car.....	81,639	82,693	13 50,370	47,158	13
14 Average number of cars, per passenger train.....	5.17	5.17	14 4	4	14
15 Average number of passengers, per passenger train .....	43	49	15 30.2	34.2	15
16 Average number of passengers, per car .....	8.5	9.5	16 7.6	8.6	16
17 Average distance travelled, per passenger.....	miles 40	45	17 39.7	41.4	17
18 Gross earnings, per passenger .....	cents 86	98	18 101.5	102.5	18
19 Gross earnings, per passenger, per mile travelled.....	cents 2.115	2.81	19 2.5	2.5	19
20 Gross passenger earnings, per train mile .....	cents 108	121	20 93.4	100.7	20
21 Gross passenger earnings, per car mile .....	cents 20.89	23.40	21 23.35	25.18	21
22 Percentage of passenger expenses to earnings.....			22 .....	.....	22

## ANALYSIS OF RAILROAD REPORTS.

49

## Statistics of Freight Traffic.

Name of Railroad.....	CHICAGO, ROCK ISLAND & PACIFIC.		BURLINGTON, CEDAR RAPIDS & NORTHERN.		
Year ending.....	MARCH 31, 1901.	MARCH 31, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
1 Number of revenue tons carried, per mile.....	2,018	2,109	1,776	1,643	1
2 Revenue ton miles, per mile.....	468,471	470,365	241,746	242,647	2
3 Freight train mileage, per mile.....	2,579	2,646	1,383	1,369	3
4 Locomotive mileage, per mile.....	5,677	6,006	3,331	3,181	4
5 Freight car mileage, per mile.....	51,671	55,721	26,356	25,198	5
6 Locomotive mileage, per locomotive.....	37,904	37,219	30,109	31,275	6
7 Freight car mileage, per car.....	a 10,872	a 11,039	3,500	3,617	7
8 Freight car mileage, per car, per day.....	a 29.8	a 30.2	9.59	9.91	8
9 Average number of all freight cars, per freight train.....	20.03	21.05	19	18.4	9
10 Average number of empty freight cars, per freight train.....			4.3	3.9	10
11 Percentage of loaded car mileage to total car mileage.....			77.31	78.97	11
12 Average revenue tons, per freight train.....	182	177.7	175	177	12
13 Average revenue tons, per loaded car.....			11.9	12.2	13
14 Average revenue tons, per loaded and empty car.....	6.4	5.9	9.2	9.6	14
15 Average distance of haul, per ton of freight..... miles	232	223	136.1	147.7	15
16 Gross earnings, per ton..... cents	230	231	163.32	177.24	16
17 Gross earnings, per ton, per mile hauled..... cents	.99	1.04	1.2	1.2	17
18 Gross freight earnings, per train mile..... cents	180	184	210.4	210.9	18
19 Gross freight earnings, per car mile..... cents	8.99	8.74	11.07	11.46	19
20 Percentage of freight expenses to earnings.....					20
21 Principal articles of freight and percentage of tonnage from each.....	26.8...b Grain and Flour...20.2 19.6... Manufactures ....23.2 14.9... Bituminous Coal...15.6 12.5... Products of Animals..11.8		Tonnage much diversified.		21

a Report not clear on this point.

b Corn furnished 10.3 % of total tonnage in 1901 and 6.2 % in 1902.

## Statistics of Physical Condition.

Name of Railroad .....	CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.		CHICAGO AND NORTH WESTERN.		
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	MAY 31, 1901.	MAY 31, 1902.	
1 Mileage owned .....	1,488	1,488	1 5,577	5,891	1
2 Mileage owned, leased and controlled by ownership of Stock .....	1,557	1,591	2 a 5,767	5,953	2
3 Average mileage operated .....	1,544	1,574	3 5,507	5,760	3
4 Mileage ballasted .....			4		4
5 Mileage of various kinds of ballast .....			5		5
6 Mileage of second, third and fourth main tracks .....	32	32	6 714	797	6
7 Mileage of yard side tracks .....	459	459	7 1,975	2,120	7
8 Number of ties renewed in track, per mile .....			8 293	281	8
9 Mileage of various weight rails .....	56 to 80 lbs. per yd.		9 72, 80 and 90 lbs. per yd.		9
10 Number of Locomotives owned, per mile .....	.179	.176	10 .192	.17	10
11 Average tractive power of Locomotives ..... pounds			11		11
12 Number of Freight Cars owned, per mile .....	6.727	6.6	12 7.53	7.5	12
13 Average capacity of Freight Cars ..... pounds			13		13
14 Number of Passenger Cars owned, per mile .....	.145	.142	14 .171	.186	14

a Includes 190 miles under construction.

## ANALYSIS OF RAILROAD REPORTS.

51

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.		CHICAGO AND NORTH WESTERN.		
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	MAY 31, 1901.	MAY 31, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	19,313	18,945	1 11,169	10,679	1
2 Bonds outstanding, per mile.....	15,653	15,354	2 24,983	25,279	2
3 Total Stocks and Bonds, per mile.....	34,966	34,299	3 36,152	35,958	3
4 Various Stocks and Bonds in Treasury, per mile.....	1,142	1,120	4 a 4,933	a 4,661	4
5 Fixed Charges, including Taxes, per mile.....	1,004	1,191	5 b 1,451	b 1,398	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	15	16.7	6 18.5	17.3	6
7 Charges ahead of Common Stock, per mile.....	1,524	1,691	7 b 1,736	b 1,670	7
8 Amount of Common Stock outstanding, per mile.....	12,020	11,791	8 7,103	6,792	8
9 Total Current Assets.....	2,618,929	2,086,076	9 5,191,883	7,718,768	9
10 Total Current Liabilities.....	2,574,831	2,642,965	10 7,055,900	7,967,364	10
11 Total Surplus.....	2,663,672	3,188,102	11 c 8,497,587	c 10,419,717	11
12 Total Surplus, per mile.....	1,725	2,025	12 1,543	1,809	12
13 Reserve Funds, for Betterments, per mile.....	367	403	13 .....	.....	13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	6,700	7,112	14 7,826	8,098	14
15 Percentage of Gross Earnings to Capital.....	34.7	37.5	15 21.6	22.5	15
16 Expenses, per mile.....	3,948	4,188	16 4,694	4,965	16
17 Percentage of Expenses to Gross Earnings.....	58.93	58.88	17 59.98	61.31	17
18 Net Earnings, per mile.....	2,752	2,924	18 3,132	3,133	18
19 Additional Miscellaneous Income, per mile.....	.....	.....	19 105	100	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,222	1,270	20 1,006	1,059	20
21 Expenses for Maintenance of Equipment, per mile.....	593	679	21 700	829	21
22 Percentage of Gross Earnings for Maintenance.....	27.1	27.4	22 21.8	23.3	22
23 Percentage of Expenses for Maintenance.....	45.9	46.5	23 36.3	38	23
24 Expenses for Conducting Transportation, per mile.....	1,969	2,096	24 2,831	2,927	24
25 General Expenses, per mile.....	156	143	25 157	150	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	31.7	31.5	26 38.2	38	26
27 Surplus Earnings, per mile.....	1,553	1,731	27 d 1,026	d 1,020	27
28 Percentage of Gross Earnings for Surplus.....	23.2	24.4	28 13.1	12.6	28
29 Betterments charged to Reserve Funds, per mile.....	315	338	29 .....	.....	29

a Book value.

b After deducting the amount of dividends received on Chicago, St. Paul, Minneapolis and Omaha stocks; \$157 per mile in 1901; \$146 per mile in 1902.

c Not including \$9,768,215 in sinking funds in 1901, and \$10,179,725 in 1902.

d After deducting \$737 per mile for betterments in 1901, and \$815 per mile in 1902.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.		CHICAGO AND NORTH WESTERN.		
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	MAY 31, 1901.	MAY 31, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile .....	.25	.243	1 .119	.118	1
2 Maintenance of Equipment, per ton mile.....cents	.121	.129	2 .104	.119	2
3 Maintenance of Passenger Cars, per car.....	506	605	3 675	535	3
4 Maintenance of Freight Cars, per car.....	28	32	4 25	39	4
5 Maintenance of Locomotives, per locomotive .....	1,237	1,556	5 1,405	1,871	5
6 Maintenance of Passenger Cars, per car, per mile run..... cents	.886	.995	6 1.069	1.073	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.422	.448	7 .282	.....	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	4.31	3.94	8 3.76	4.23	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile .....	1,286	1,389	9 3,077	3,238	9
10 Passenger miles, per mile.....	65,123	73,972	10 87,756	94,041	10
11 Passenger train mileage, per mile.....	1,705	1,716	11 2,211	2,401	11
12 Passenger car mileage, per mile .....	8,288	8,658	12 10,711	.....	12
13 Passenger car mileage, per car.....	57,127	60,836	13 63,169	.....	13
14 Average number of cars, per passenger train.....	4.86	5.05	14 4.87	.....	14
15 Average number of passengers, per passenger train .....	38	43	15 39.66	39.17	15
16 Average number of passengers, per car.....	7.8	8.5	16 8.1	.....	16
17 Average distance travelled, per passenger.....miles	50.65	52.9	17 28.52	29.05	17
18 Gross earnings, per passenger .....	122	122.6	18 57	58	18
19 Gross earnings, per passenger, per mile travelled .....	2.41	2.32	19 2.01	2.01	19
20 Gross passenger earnings, per train mile .....	109	117	20 95	94	20
21 Gross passenger earnings, per car mile.....cents	23.4	23.2	21 19.51	.....	21
22 Percentage of passenger expenses to earnings.....	.....	.....	22 .....	.....	22



## Statistics of Freight Traffic.

Name of Railroad.....	CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.		CHICAGO AND NORTH WESTERN.		
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	MAY 31, 1901.	MAY 31, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile.....	3,049	3,223	1 4,589	5,091	1
2 Revenue ton miles, per mile.....	489,532	522,964	2 672,128	715,701	2
3 Freight train mileage, per mile.....	2,021	2,119	3 2,892	2,867	3
4 Locomotive mileage, per mile.....	5,114	5,436	4 7,193	7,289	4
5 Freight car mileage, per mile.....	44,649	48,598	5 66,696	.....	5
6 Locomotive mileage, per locomotive.....	28,538	30,891	6 37,377	41,310	6
7 Freight car mileage, per car.....	a 6,638	a 7,364	7 a 8,858	.....	7
8 Freight car mileage, per car, per day.....	a 18	a 20	8 a 24.3	.....	8
9 Average number of all freight cars, per freight train.....	22	23	9 23.06	.....	9
10 Average number of empty freight cars, per freight train.....	5.1	5.8	10 5.9	.....	10
11 Percentage of loaded car mileage to total car mileage.....	77	75	11 74.4	.....	11
12 Average revenue tons, per freight train.....	242	247	12 232.37	249.65	12
13 Average revenue tons, per loaded car.....	14.16	14.35	13 13.54	14	13
14 Average revenue tons, per loaded and empty car.....	11	10.7	14 10.1	.....	14
15 Average distance of haul, per ton of freight..... miles	161	162	15 146.46	140.59	15
16 Gross earnings, per ton..... cents	155.9	156	16 124	114	16
17 Gross earnings, per ton, per mile hauled..... cents	.971	.961	17 .85	.81	17
18 Gross freight earnings, per train mile..... cents	235	237	18 198	203	18
19 Gross freight earnings, per car mile..... cents	10.65	10.35	19 8.59	.....	19
20 Percentage of freight expenses to earnings.....	.....	.....	20 .....	.....	20
21 Principal articles of freight and percentage of tonnage from each.....	.....		21 { .....	.....	21

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	CHICAGO, MILWAUKEE AND ST. PAUL.		CHICAGO, BURLINGTON AND QUINCY.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	6,604	6,617	1 Not stated.	Not stated.	1
2 Mileage owned, leased and controlled by ownership of Stock.....	6,781	6,793	2 <i>a</i> 7,993	<i>a</i> 8,124	2
3 Average mileage operated.....	6,512	6,605	3 <i>b</i> 7,753	<i>b</i> 8,109	3
4 Mileage ballasted.....			4		4
5 Mileage of various kinds of ballast.....			5		5
6 Mileage of second and additional main track.....	302	316	6 423	464	6
7 Mileage of yards and sidings.....	1,676	1,772	7 <i>c</i> 1,690	<i>c</i> 1,690	7
8 Number of ties renewed in track, per mile.....	279	281	8		8
9 Mileage of various weight rails.....	56 to 85 lbs. per yd.		9	56 to 75 lbs. per yd.	9
10 Number of Locomotives owned, per mile.....	.136	.144	10 <i>d</i> .149	<i>d</i> .145	10
11 Average tractive power of Locomotives.....pounds			11		11
12 Number of Freight Cars owned, per mile.....	5,823	5,98	12 <i>d</i> 5.54	<i>d</i> 5.13	12
13 Average capacity of Freight Cars.....pounds	49,035	50,584	13		13
14 Number of Passenger Cars owned, per mile.....	.131	.134	14 <i>d</i> .13	<i>d</i> .125	14

*a* C. B. & Q. controls narrow gauge road not included in mileage here recorded, although contributing to earnings; 179 miles in 1901 and 229 miles in 1902.

*b* Not including the Kansas City and Omaha Railway, 203 miles, which is operated separately.

*c* Approximate.

*d* Excluding narrow gauge equipment, because narrow gauge mileage is excluded.

## ANALYSIS OF RAILROAD REPORTS.

55

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	CHICAGO, MILWAUKEE AND ST. PAUL.		CHICAGO, BURLINGTON AND QUINCY.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	15,430	15,880	1 14,263	13,664	1
2 Bonds outstanding, per mile.....	19,493	18,897	2 c 18,987	c 18,705	2
3 Total Stocks and Bonds, per mile.....	34,923	34,777	3 33,250	32,369	3
4 Various Stocks and Bonds in Treasury, per mile.....	333	336	4 574	1,101	4
5 Fixed Charges including Taxes, per mile.....	1,197	1,152	5 1,272	1,239	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	18	16.7	6 19.9	18.7	6
7 Charges ahead of Common Stock, per mile.....	1,677	1,647	7 1,272	1,239	7
8 Amount of Common Stock outstanding, per mile.....	8,572	8,809	8 14,263	13,664	8
9 Total Current Assets.....	17,845,840	17,865,745	9 9,723,558	14,460,087	9
10 Total Current Liabilities.....	7,307,697	7,401,492	10 6,929,848	12,241,649	10
11 Total Surplus.....	a 17,626,229	a 20,682,069	11 d 26,376,647	d 32,807,620	11
12 Total Surplus, per mile.....	2,707	3,131	12 3,402	4,046	12
13 Reserve Funds, for Betterments, per mile.....	533	726	13 1,506	1,440	13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	6,506	6,906	14 6,456	6,634	14
15 Percentage of Gross Earnings to Capital.....	18.6	19.8	15 19.4	20.5	15
16 Expenses, per mile.....	b 3,728	b 3,985	16 4,184	4,194	16
17 Percentage of Expenses to Gross Earnings.....	57.3	57.7	17 64.8	63.2	17
18 Net Earnings, per mile.....	2,778	2,921	18 2,272	2,440	18
19 Additional Miscellaneous Income, per mile.....	27	66	19 49	42	19
20 Expenses for Maintenance of Way and Structure, per mile.....	999	1,093	20 1,119	960	20
21 Expenses for Maintenance of Equipment, per mile.....	464	509	21 786	916	21
22 Percentage of Gross Earnings for Maintenance.....	22.5	23.2	22 29.5	28.3	22
23 Percentage of Expenses for Maintenance.....	35.8	40.2	23 45.5	44.7	23
24 Expenses for Conducting Transportation, per mile.....	2,139	2,253	24 2,087	2,138	24
25 General Expenses, per mile.....	125	130	25 192	180	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	34.7	34.5	26 35.3	31.9	26
27 Surplus Earnings, per mile.....	b 1,256	b 1,460	27 1,048	c 1,243	27
28 Percentage of Gross Earnings for Surplus.....	19	21.1	28 16.2	18.7	28
29 Betterments charged to Reserve Funds, per mile.....	541	375	29		29

a Not including a Sinking Fund of \$683,185 in 1901 and \$763,646 in 1902.

b After deducting \$33 per mile appropriated for betterments in 1901 and \$875 per mile in 1902.

c Includes Bonds held in Sinking Fund, amounting to \$1,708 per mile in 1901 and \$1,586, per mile in 1902.

d Sinking Funds not included, amounting to \$31,599,245 in 1901 and \$20,332,200 in 1902.

e The Chicago, Burlington and Quincy Railway leases the C. B. &amp; Q. Railroad, and pays as rental, 7% on the stock of the latter. The surplus in 1902 over and above this rental was \$156 per mile.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	CHICAGO, MILWAUKEE AND ST. PAUL.		CHICAGO, BURLINGTON AND QUINCY.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.178	.181	1 .222	.169	1
2 Maintenance of Equipment, per ton mile.....cents	.083	.084	2 .157	.161	2
3 Maintenance of Passenger Cars, per car.....	568	562	3 645	714	3
4 Maintenance of Freight Cars, per car.....	27	33	4 58	70	4
5 Maintenance of Locomotives, per locomotive.....	948	1,037	5 1,901	2,194	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.....	.....	6 .....	.....	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.26	.31	7 .....	.....	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	.....	.....	8 .....	.....	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	1,276	1,387	9 .....	.....	9
10 Passenger miles, per mile.....	52,464	58,281	10 68,772	74,009	10
11 Passenger train mileage, per mile.....	1,523	1,551	11 1,780	1,859	11
12 Passenger car mileage, per mile.....	.....	.....	12 .....	.....	12
13 Passenger car mileage, per car.....	.....	.....	13 .....	.....	13
14 Average number of cars, per passenger train.....	.....	.....	14 .....	.....	14
15 Average number of passengers, per passenger train.....	34.45	37.4	15 33	39.8	15
16 Average number of passengers, per car.....	.....	.....	16 .....	.....	16
17 Average distance travelled, per passenger..... miles	41.07	42.03	17 .....	.....	17
18 Gross earnings, per passenger.....cents	95.28	97.38	18 .....	.....	18
19 Gross earnings, per passenger, per mile travelled.....cents	2.32	2.317	19 2.16	2.12	19
20 Gross passenger earnings, per train mile..... cents	80.05	87.04	20 118.72	115.84	20
21 Gross passenger earnings, per car mile..... cents	.....	.....	21 .....	.....	21
22 Percentage of passenger expenses to earnings.....	.....	.....	22 .....	.....	22

## Statistics of Freight Traffic.

Name of Railroad.....	CHICAGO, MILWAUKEE AND ST. PAUL.		CHICAGO, BURLINGTON AND QUINCY.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile.....	2,766	3,011	1		1
2 Revenue ton miles, per mile.....	558,965	604,095	2	199,249	568,883
3 Freight train mileage, per mile.....	2,363	2,376	3	2,472	2,328
4 Locomotive mileage, per mile.....			4		
5 Freight car mileage, per mile.....	47,093	63,706	5		
6 Locomotive mileage, per locomotive.....			6		
7 Freight car mileage, per car.....	a 10,373	a 10,645	7		
8 Freight car mileage, per car, per day.....	a 28.4	a 29.2	8		
9 Average number of all freight cars, per freight train.....	25.56	26.78	9		
10 Average number of empty freight cars, per freight train.....	7.28	7.721	10		
11 Percentage of loaded car mileage to total car mileage.....	71.63	71.1	11		
12 Average revenue tons, per freight train.....	236.65	254.25	12	202	255
13 Average revenue tons, per loaded car.....	12.94	13.34	13		
14 Average revenue tons, per loaded and empty car.....	9.26	9.05	14		
15 Average distance of haul, per ton of freight.....miles	204.1	200.65	15		
16 Gross earnings, per ton.....cents	174.1	168.5	16		
17 Gross earnings, per ton, per mile hauled.....cents	.861	.84	17	.862	.772
18 Gross freight earnings, per train mile.....cents	203.8	213.6	18	175.62	191.38
19 Gross freight earnings, per car mile.....cents	7.97	7.976	19		
20 Percentage of freight expenses to earnings.....			20		
	7.9.....Wheat.....7.4				
	19.9.....Other Agricultural Prod.....17.4				
21 Principal articles of freight and percentage of tonnage from each	20.3.....Products of Mines.....22.6		21		
	19.1.....Products of Forests.....18.5				
	15.....Manufactures.....17.6				

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	WABASH.		WHEELING AND LAKE ERIE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	1,717	1,936	1 461	461	1
2 Mileage owned, leased and controlled by ownership of Stock.....	2,367	2,483	2 470	473	2
3 Average mileage operated.....	2,360	2,438	3 442	442	3
4 Mileage ballasted.....	1,502	b 1,750	4	469	4
5 Mileage of various kinds of ballast.....	{ Gravel..... 1,300 }		5	{ Gravel..... 409 }	5
	{ Burnt Clay..... 500 }			{ Cinder..... 60 }	
	{ Crushed Rock..... 50 }				
6 Mileage of second, third and fourth main tracks.....			6 4	4	6
7 Mileage of yard and side tracks.....	a 886	a 940	7 193	207	7
8 Number of ties renewed in track, per mile.....	561	399	8 441	515	8
9 Mileage of various weight rails.....	{ 56 to 80 lbs. per yd. .... }		9	{ 56 to 80 lbs. per yd. .... }	9
10 Number of Locomotives owned, per mile.....	.184	.201	10 .258	.27	10
11 Average tractive power of Locomotives..... pounds.....		17,297	11	19,667	11
12 Number of Freight Cars owned, per mile.....	6.69	6.86	12 18.18	21.31	12
13 Average capacity of Freight Cars..... pounds.....		56,960	13 50,981	58,520	13
14 Number of Passenger Cars owned, per mile.....	.15	.162	14 .133	.131	14

a Includes second track.

b Exclusive of 733 miles of soil and cinders.

## Statistics of—Assets and Liabilities—Income and Expenses

Name of Railroad.....	WABASH.		WHEELING AND LAKE ERIE.		
Year ending .....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	22,034	21,329	1 80,778	83,666	1
2 Bonds outstanding, per mile.....	a 36,051	a 37,781	2 32,100	35,829	2
3 Total Stocks and Bonds, per mile.....	58,085	59,110	3 112,878	119,495	3
4 Various Stocks and Bonds in Treasury, per mile.....	543	565	4 1,047	1,046	4
5 Fixed Charges, including Taxes, per mile.....	1,739	1,785	5 1,660	1,678	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	23.4	22.8	6 24.8	21	6
7 Charges ahead of Common Stock, per mile.....	3,214	3,213	7 3,081	3,214	7
8 Amount of Common Stock outstanding, per mile.....	11,864	11,485	8 15,271	45,271	8
9 Total Current Assets.....	2,166,369	3,354,411	9 931,631	1,310,345	9
10 Total Current Liabilities.....	3,927,625	1,358,518	10 1,317,017	1,411,832	10
11 Total Surplus.....	403,000	642,421	11 353,504	125,627	11
12 Total Surplus, per mile.....	171	264	12 800	963	12
13 Reserve Funds, for Betterments, per mile.....			13		13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	7,437	7,815	14 6,679	7,999	14
15 Percentage of Gross Earnings to Capital.....	12.8	13.2	15 5.9	6.7	15
16 Expenses, per mile.....	5,403	5,679	16 4,695	5,866	16
17 Percentage of Expenses to Gross Earnings.....	72.64	72.68	17 70.29	73.33	17
18 Net Earnings, per mile.....	2,034	2,135	18 1,981	2,133	18
19 Additional Miscellaneous Income, per mile.....	111	131	19 7		19
20 Expenses for Maintenance of Way and Structure, per mile.....	b 1,045	b 1,195	20 759	1,183	20
21 Expenses for Maintenance of Equipment, per mile.....	b 1,066	b 1,026	21 889	1,207	21
22 Percentage of Gross Earnings for Maintenance.....	b 28.1	b 28.4	22 24.7	29.9	22
23 Percentage of Expenses for Maintenance.....	b 39	39.1	23 35.1	40.7	23
24 Expenses for Conducting Transportation, per mile.....	b 3,171	b 3,327	24 2,797	3,241	24
25 General Expenses, per mile.....	120	131	25 250	236	25
26 Percentage of Gross for Conduct, Trans. and General Expenses.....	b 44.2	b 44.3	26 45.6	43.5	26
27 Surplus Earnings, per mile.....	c 128	c 160	27 332	163	27
28 Percentage of Gross Earnings for Surplus.....	1.7	2.2	28 5	2	28
29 Betterments charged to Reserve Funds, per mile.....			29		29

a Includes \$12,712 per mile of Debenture bonds in 1901 and \$12,305 per mile in 1902.

b Estimated.

c After deducting \$378 per mile spent for betterments in 1901 and \$312 per mile in 1902.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	WABASH.		WHEELING AND LAKE ERIE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>Year ending</b> .....					
<b>MAINTENANCE EXPENSES.</b>					
1 Maintenance of Way and Structure, per ton mile.....cents	.126	.15	1 .079	.09	1
2 Maintenance of Equipment, per ton mile.....cents	.127	.135	2 .092	.092	2
3 Maintenance of Passenger Cars, per car.....	673	692	3 549	619	3
4 Maintenance of Freight Cars, per car.....	67	44	4 17	22	4
5 Maintenance of Locomotives, per locomotive.....	2,187	2,375	5 1,561	2,077	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.698	.768	6 1.283	1.397	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.39	.313	7 .122	.561	7
8 Maintenance of Locomotives, per locomotive, per mile run..... cents	5.10	5.68	8 .....	7.13	8
<b>PASSENGER TRAFFIC.</b>					
9 Number of passengers carried, per mile.....	2,094	2,096	9 1,759	1,931	9
10 Passenger miles, per mile.....	111,978	132,366	10 15,515	53,700	10
11 Passenger train mileage, per mile.....	3,066	3,155	11 1,947	1,799	11
12 Passenger car mileage, per mile.....	14,465	14,626	12 3,710	3,816	12
13 Passenger car mileage, per car.....	96.164	90,050	13 42,769	44,324	13
14 Average number of cars, per passenger train.....	4.57	4.64	14 2.91	3.23	14
15 Average number of passengers, per passenger train.....	36.51	42	15 68.25	80.78	15
16 Average number of passengers, per car.....	8	9.1	16 23.29	25.01	16
17 Average distance travelled, per passenger..... miles	53.5	63.2	17 25.96	27.8	17
18 Gross earnings, per passenger.....cents	100.8	113.13	18 51.86	52.28	18
19 Gross earnings, per passenger, per mile travelled..... cents	1.885	1.791	19 2	1.88	19
20 Gross passenger earnings, per train mile.....cents	85.14	91.4	20 53.43	63.83	20
21 Gross passenger earnings, per car mile.....cents	18.63	19.71	21 18.22	19.74	21
22 Percentage of passenger expenses to earnings.....	67	68.7	22 .....	.....	22



## Statistics of Freight Traffic.

Name of Railroad.....	WABASH.		WHEELING AND LAKE ERIE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile .....	3,540	3,519	1 9,695	11,896	1
2 Revenue ton miles, per mile.....	838,539	798,771	2 963,095	1,317,327	2
3 Freight train mileage, per mile.....	2,958	2,806	3 2,483	3,061	3
4 Locomotive mileage, per mile.....	7,849	7,611	4 .....	7,844	4
5 Freight car mileage, per mile.....	77,954	74,010	5 71,503	83,177	5
6 Locomotive mileage, per locomotive .....	50,309	48,804	6 .....	29,136	6
7 Freight car mileage, per car.....	11,352	10,293	7 63,966	63,921	7
8 Freight car mileage, per car, per day.....	31.1	28.2	8 610.9	610.7	8
9 Average number of all freight cars, per freight train.....	26.3	26.4	9 28.8	27.17	9
10 Average number of empty freight cars, per freight train.....	7.8	7.4	10 8.64	7.26	10
11 Percentage of loaded car mileage to total car mileage.....	73	71.9	11 70	73.3	11
12 Average revenue tons, per freight train.....	283.47	284.66	12 387.86	430.37	12
13 Average revenue tons, per loaded car.....	16.67	16.69	13 20.58	22.62	13
14 Average revenue tons, per loaded and empty car.....	11.73	12	14 14.41	16.57	14
15 Average distance of haul, per ton of freight..... miles	215.1	206.5	15 99.3	109.3	15
16 Gross earnings, per ton..... cents	133.56	137.13	16 56.2	55.68	16
17 Gross earnings, per ton, per mile hauled..... cents	.564	.604	17 .566	.503	17
18 Gross freight earnings, per train mile..... cents	139.84	171.95	18 219	216	18
19 Gross freight earnings, per car mile..... cents	6.077	6.51	19 7.62	7.95	19
20 Percentage of freight expenses to earnings.....	77	76.6	20 .....	.....	20
21 Principal articles of freight and percentage of tonnage from each.....	29 aProducts of Agriculture.....21	20.5.....Bituminous Coal.....25.6	42.....Bituminous Coal.....43	26.....Manufactures.....25	21
	15 .....Manufactures.....15.8		16.....Coke, Ores, Stone, Sand, etc.....20		

a Corn gave 11% of tonnage in 1901 and 5% in 1902.

b Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	ANN ARBOR.		HOCKING VALLEY.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Mileage owned.....	292	292	1 321	321	1
2 Mileage owned, leased and controlled by ownership of Stock.....	292	292	2 361	361	2
3 Average mileage operated.....	292	292	3 347	347	3
4 Mileage ballasted.....			4 .....	.....	4
5 Mileage of various kinds of ballast.....			5 .....	.....	5
6 Mileage of second, third and fourth main tracks.....			6 26	26	6
7 Mileage of yard and side tracks.....	87	93	7 189	211	7
8 Number of ties renewed in track, per mile.....	777	a 685	8 580	508	8
9 Mileage of various weight rails.....	a 75 ....70 lbs. per yd....a 105 a 217 ....56 lbs. per yd....a 187		9 52 to 80 lbs. per yd.		9
10 Number of Locomotives owned, per mile.....	.15	.158	10 .3	.323	10
11 Average tractive power of Locomotives..... pounds			11 .....	.....	11
12 Number of Freight Cars owned, per mile.....	8.87	7.94	12 31.53	41.487	12
13 Average capacity of Freight Cars..... pounds			13 .....	.....	13
14 Number of Passenger Cars owned, per mile.....	.09	.095	14 .187	.187	14

a Approximate.

## ANALYSIS OF RAILROAD REPORTS.

63

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	ANN ARBOR.		HOCKING VALLEY.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>Year ending .....</b>					
<b>ASSETS AND LIABILITIES.</b>					
1 Stocks outstanding, per mile.....	24,829	24,829	1 70,379	70,379	1
2 Bonds outstanding, per mile.....	23,973	23,973	2 50,018	57,835	2
3 Total Stocks and Bonds, per mile.....	48,802	48,802	3 120,397	128,214	3
4 Various Stocks and Bonds in Treasury, per mile.....			4 34,009	34,173	4
5 Fixed Charges, Including Taxes, per mile.....	1,134	1,139	5 3,221	3,265	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	18.9	17.6	6 24	21.3	6
7 Charges ahead of Common Stock, per mile.....	1,819	1,824	7 4,835	4,879	7
8 Amount of Common Stock outstanding, per mile.....	11,130	11,130	8 30,033	30,033	8
9 Total Current Assets.....	197,433	679,932	9 2,589,820	2,610,122	9
10 Total Current Liabilities.....	405,373	398,394	10 2,096,178	1,711,652	10
11 Total Surplus.....	310,158	498,015	11 1,579,647	2,306,563	11
12 Total Surplus, per mile.....	1,062	1,706	12 4,552	6,647	12
13 Reserve Funds, for Betterments, per mile.....			13 1,190	1,189	13
<b>INCOME AND EXPENSES.</b>					
14 Gross Earnings, per mile.....	6,009	6,486	14 13,410	15,321	14
15 Percentage of Gross Earnings to Capital.....	12.3	13.3	15 11.1	11.9	15
16 Expenses, per mile.....	a 4,485	a 4,703	16 7,653	8,892	16
17 Percentage of Expenses to Gross Earnings.....	74.6	72.5	17 57.07	58.03	17
18 Net Earnings, per mile.....	1,524	1,783	18 5,757	6,429	18
19 Additional Miscellaneous Income, per mile.....			19 1,366	1,454	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,194	1,408	20 1,489	1,637	20
21 Expenses for Maintenance of Equipment, per mile.....	1,044	919	21 2,154	2,479	21
22 Percentage of Gross Earnings for Maintenance.....	37	35.9	22 27.2	26.87	22
23 Percentage of Expenses for Maintenance.....	50	49.4	23 47.6	46.3	23
24 Expenses for Conducting Transportation, per mile.....	2,065	2,172	24 3,701	4,117	24
25 General Expenses, per mile.....	181	203	25 308	359	25
26 Percentage of Gross for Conduct, Trans. and General Expenses.....	37.1	36.7	26 29.9	31.16	26
27 Surplus Earnings, per mile.....	390	611	27 3,903	1,618	27
28 Percentage of Gross Earnings for Surplus.....	6.5	9.9	28 29.9	30.1	28
29 Betterments charged to Reserve Funds, per mile.....			29		29

a Includes \$612 per mile for betterments charged to maintenance expenses in 1901, and \$575 per mile in 1902.

b Hocking Valley also, jointly with Toledo and Ohio Central, guarantees principal and interest on \$5,500,000 Coal Company Bonds.

c Report does not show clearly whether these are strictly investment holdings, as defined on pages eight and nine herein, or are securities of parts of the Hocking Valley system.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	ANN ARBOR.		HOCKING VALLEY.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.183	.205	.062	.057	1
2 Maintenance of Equipment, per ton mile.....cents	.169	.134	.09	.087	2
3 Maintenance of Passenger Cars, per car.....	917	950	621	554	3
4 Maintenance of Freight Cars, per car.....	30	37	11	40	4
5 Maintenance of Locomotives, per locomotive.....	1,527	1,418	1,491	1,583	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents			1.178	1.416	6
7 Maintenance of Freight Cars, per car, per mile run.....cents			.939	.935	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents			5.442	5.133	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	1,495	1,545	5,891	5,613	9
10 Passenger miles, per mile.....	51,659	56,253	93,104	93,263	10
11 Passenger train mileage, per mile.....	1,426	1,445	2,062	1,911	11
12 Passenger car mileage, per mile.....			7,868	7,328	12
13 Passenger car mileage, per car.....			42,003	39,121	13
14 Average number of cars, per passenger train.....			3.8	3.8	14
15 Average number of passengers, per passenger train.....	36.2	38.9	45	49	15
16 Average number of passengers, per car.....			11.9	12.9	16
17 Average distance travelled, per passenger.....miles	34.6	36.4	15.8	16.62	17
18 Gross earnings, per passenger.....cents	78.5	82.1	32.84	36.7	18
19 Gross earnings, per passenger, per mile travelled.....cents	2.27	2.25	2.08	2.21	19
20 Gross passenger earnings, per train mile.....cents	95.22	101.05	106	121	20
21 Gross passenger earnings, per car mile.....cents			27.9	31.84	21
22 Percentage of passenger expenses to earnings.....					22

## Statistics of Freight Traffic.

Name of Railroad.....	ANN ARBOR.		HOCKING VALLEY.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Number of revenue tons carried, per mile .....	5,271	5,462	19,472	23,506	1
2 Revenue ton miles, per mile.....	654,966	685,838	2,402,100	2,891,562	2
3 Freight train mileage, per mile.....	2,248	2,447	3,722	4,267	3
4 Locomotive mileage, per mile.....			a 8,211	a 9,376	4
5 Freight car mileage, per mile.....			150,826	173,240	5
6 Locomotive mileage, per locomotive .....			a 27,396	a 29,049	6
7 Freight car mileage, per car.....			a 4,367	a 4,276	7
8 Freight car mileage, per car, per day.....			a 12	a 11.7	8
9 Average number of all freight cars, per freight train.....			41	40.6	9
10 Average number of empty freight cars, per freight train.....					10
11 Percentage of loaded car mileage to total car mileage.....					11
12 Average revenue tons, per freight train .....	291	280	645	678	12
13 Average revenue tons, per loaded car.....	15.9	16.7			13
14 Average revenue tons, per loaded and empty car.....			15.73	16.7	14
15 Average distance of haul, per ton of freight .....	miles 124.3	125.5	123.4	123.01	15
16 Gross earnings, per ton.....	cents 81.7	85.6	54.57	52.64	16
17 Gross earnings, per ton, per mile hauled.....	cents .65	.68	.442	.428	17
18 Gross freight earnings, per train mile.....	cents 190.14	191.16	285	290	18
19 Gross freight earnings, per car mile.....	cents		6.95	7.145	19
20 Percentage of freight expenses to earnings.....					20
21 Principal articles of freight and percentage of tonnage from each	31.8 .. Lumber and Logs .. 30.2 19.9 .. Prod. of Agriculture .. 13.9 19 .. Manufactures .. 20.6 18.6 .. Bituminous Coal .. 23.8		61.7 .. Bituminous Coal .. 61 8.7 .. Manufactures .. 11.3 8.2 .. Coke .. 6.9		21

a Report not clear on this point.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.....	WISCONSIN CENTRAL		CLEVELAND, LORAIN AND WHEELING.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	983	983	1 192	192	1
2 Mileage owned, leased and controlled by ownership of Stock.....	1,048	1,043	2 192	192	2
3 Average mileage operated.....	955	978	3 192	192	3
4 Mileage ballasted.....			4		4
5 Mileage of various kinds of ballast.....			5		5
6 Mileage of second and additional main track.....	4	4	6 3	3	6
7 Mileage of yards and sidings.....	251	301	7 115	115	7
8 Number of ties renewed in track, per mile.....	287	146	8 1,133		8
9 Mileage of various weight rails.....	362, 56 and 60 lbs. per yd. 324 162, 70 lbs. per yd. 159 150, 80 lbs. per yd. 151 85, 85 lbs. per yd. 128		9 60 to 80 lbs. per yd.		9
10 Number of Locomotives owned, per mile.....	.164	.161	10 .339	.333	10
11 Average tractive power of Locomotives.....pounds			11		11
12 Number of Freight Cars owned, per mile.....	8.35	8.83	12 23.88	23.75	12
13 Average capacity of Freight Cars.....pounds			13		13
14 Number of Passenger Cars owned, per mile.....	.13	.122	14 .177	.177	14
15 Aggregate length of wooden bridges.....feet	1,683	1,773	15		15

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.	WISCONSIN CENTRAL.		CLEVELAND, LORAIN AND WHEELING.	
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.
<b>ASSETS AND LIABILITIES.</b>				
1 Stocks outstanding, per mile.....	28,707	28,032	1 67,708	67,708 1
2 Bonds outstanding, per mile.....	28,937	27,605	2 36,676	36,282 2
3 Total Stocks and Bonds, per mile.....	57,644	55,637	3 104,384	103,990 3
4 Various Stocks and Bonds in Treasury, per mile.....	56	55	4 1,563	1,563 4
5 Fixed Charges including Taxes, per mile.....	1,710	1,754	5 2,246	2,254 5
6 Percentage of Fixed Charges and Taxes to Earnings.....	30.7	28.4	6 20.9	16.1 6
7 Charges ahead of Common Stock, per mile.....	2,182	2,215	7 3,548	3,556 7
8 Amount of Common Stock outstanding, per mile.....	16,909	16,511	8 41,667	41,667 8
9 Total Current Assets.....	1,203,713	1,919,578	9 678,211	429,096 9
10 Total Current Liabilities.....	1,177,835	1,157,945	10 821,973	113,120 10
11 Total Surplus.....	276,935	632,049	11 968,333	968,340 11
12 Total Surplus, per mile.....	290	646	12 5,043	5,043 12
13 Reserve Funds, for Betterments, per mile.....	830	188	13 ..... 2,271	2,271 13
<b>INCOME AND EXPENSES.</b>				
14 Gross Earnings, per mile.....	5,575	6,179	14 10,748	14,024 14
15 Percentage of Gross Earnings to Capital.....	9.7	11.1	15 10.3	13.5 15
16 Expenses, per mile.....	3,630	3,972	16 6,885	7,858 16
17 Percentage of Expenses to Gross Earnings.....	65.1	64.3	17 64.06	56.03 17
18 Net Earnings, per mile.....	1,945	2,207	18 3,863	6,166 18
19 Additional Miscellaneous Income, per mile.....	22	38	19 ..... 4	4 19
20 Expenses for Maintenance of Way and Structure, per mile.....	660	799	20 2,108	1,599 20
21 Expenses for Maintenance of Equipment, per mile.....	501	624	21 1,263	1,361 21
22 Percentage of Gross Earnings for Maintenance.....	20.8	23	22 31.36	24.09 22
23 Percentage of Expenses for Maintenance.....	32	35.8	23 49	37.6 23
24 Expenses for Conducting Transportation, per mile.....	2,212	2,305	24 3,105	4,396 24
25 General Expenses, per mile.....	257	244	25 409	505 25
26 Percentage of Gross for Conduct, Trans. and General Expenses.....	44.3	41.3	26 32.7	34.94 26
27 Surplus Earnings, per mile.....	258	a 366	27 1,617	b 2,274 27
28 Percentage of Gross Earnings for Surplus.....	4.6	5.9	28 15	16.2 28
29 Betterments charged to Reserve Funds, per mile.....	.....	.....	29 ..... 2,271	2,271 29

a After deducting \$138 per mile for betterments.

b After deducting \$1,642 per mile for betterments. The remaining surplus was also reserved for future betterments.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	WISCONSIN CENTRAL.		CLEVELAND, LORAIN AND WHEELING.		-
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.12	.123	1 .111	.069	1
2 Maintenance of Equipment, per ton mile.....cents	.091	.096	2 .07	.059	2
3 Maintenance of Passenger Cars, per car.....	515	579	3 490		3
4 Maintenance of Freight Cars, per car.....	20	23	4 23		4
5 Maintenance of Locomotives, per locomotive.....	1,617	2,165	5 1,294		5
6 Maintenance of Passenger Cars, per car, per mile run.....cents			6		6
7 Maintenance of Freight Cars, per car, per mile run.....cents			7 .05		7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	4.23	5.33	8		8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	1,027	1,084	9 2,611	2,524	9
10 Passenger miles, per mile.....	56,685	59,342	10 68,071	67,242	10
11 Passenger train mileage, per mile.....	1,748	1,738	11 2,166	2,147	11
12 Passenger car mileage, per mile.....			12		12
13 Passenger car mileage, per car.....			13		13
14 Average number of cars, per passenger train.....			14		14
15 Average number of passengers, per passenger train.....	32.44	34.14	15 31.4	31.3	15
16 Average number of passengers, per car.....			16		16
17 Average distance travelled, per passenger.....miles	55.2	54.8	17 26.11	26.68	17
18 Gross earnings, per passenger.....cents	115	114	18 43.49	51.44	18
19 Gross earnings, per passenger, per mile travelled.....cents	2.08	2.08	19 1.67	1.93	19
20 Gross passenger earnings, per train mile.....cents	81.29	88.37	20 63.306	68.226	20
21 Gross passenger earnings, per car mile.....cents			21		21
22 Percentage of passenger expenses to earnings.....			22		22



## Statistics of Freight Traffic.

Name of Railroad.....	WISCONSIN CENTRAL.		CLEVELAND, LORAIN AND WHEELING.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile.....	3,590	4,095	18,927	24,508	1
2 Revenue ton miles, per mile.....	547,506	650,709	1,797,406	2,317,512	2
3 Freight train mileage, per mile.....	2,124	2,270	3,902	1,840	3
4 Locomotive mileage, per mile.....	4,801	5,022			4
5 Freight car mileage, per mile.....			105,479	125,142	5
6 Locomotive mileage, per locomotive.....	38,232	40,616			6
7 Freight car mileage, per car.....			a 4,566	a 5,269	7
8 Freight car mileage, per car, per day.....			a 12.5	a 11.5	8
9 Average number of all freight cars, per freight train.....			26.13	25.9	9
10 Average number of empty freight cars, per freight train.....			7.43	7.87	10
11 Percentage of loaded car mileage to total car mileage.....			71.89	69.61	11
12 Average revenue tons, per freight train.....	259.98	286.64	461	482	12
13 Average revenue tons, per loaded car.....	14.31	15.01	23.74	21.25	13
14 Average revenue tons, per loaded and empty car.....			17.44	18.6	14
15 Average distance of haul, per ton of freight.....miles	152.5	158.9	95.11	94.71	15
16 Gross earnings, per ton.....cents	113.139	112.5	49.54	51.21	16
17 Gross earnings, per ton, per mile hauled.....cents	.742	.709	.521	.541	17
18 Gross freight earnings, per train mile.....cents	191	203	240.34	259.15	18
19 Gross freight earnings, per car mile.....cents			9.093	10.02	19
20 Percentage of freight expenses to earnings.....					20
21 Principal articles of freight and percentage of tonnage from each.....			51.9 .....Coal and Coke.....	55.9	21
			22.1 .....Ore, Sand, etc.....	15.8	

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad .....	MINNEAPOLIS AND ST. LOUIS.		IOWA CENTRAL.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	632	632	1 500	490	1
2 Mileage owned, leased and controlled by ownership of Stock .....	668	653	2 506	558	2
3 Average mileage operated.....	633	633	3 506	558	3
4 Mileage ballasted .....	380	389	4 167	182	4
5 Mileage of various kinds of ballast. ....	380 ... Gravel ... 389		5 { Cinders.....87 Gravel.....87 Stone.....6 }		5
6 Mileage of second, third and fourth main tracks.....	20	20	6 .....	3	6
7 Mileage of yard side tracks.....	120	122	7 116	113	7
8 Number of ties renewed in track, per mile .....			8 .....		8
9 Mileage of various weight rails .....	278 ...60 lbs. per yd....278 224 ...70 lbs. per yd....224 77 ...80 lbs. per yd....77		9 { 103....56 lbs. per yd....110 182....60 lbs. per yd....175 205 ...70 lbs. per yd....208 }		9
10 Number of Locomotives owned, per mile .....	.126	.125	10 .15	.136	10
11 Average tractive power of Locomotives .....pounds		18,483	11 .....	18,453	11
12 Number of Freight Cars owned, per mile ..	4.85	4.59	12 4.9	4.6	12
13 Average capacity of Freight Cars.....pounds		48,412	13 .....	52,850	13
14 Number of Passenger Cars owned, per mile .....	.101	.107	14 .077	.073	14
15 Aggregate length of wooden bridges.....feet	660	297	15 130	107	15
16 Aggregate length of wooden trestles.....feet	46,907	46,907	16 44,614	44,314	16

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	MINNEAPOLIS AND ST. LOUIS.		IOWA CENTRAL.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>ASSETS AND LIABILITIES.</b>					
1 Stocks outstanding, per mile.....	15,460	15,460	1 28,023	25,327	1
2 Bonds outstanding, per mile.....	27,351	26,916	2 15,118	17,291	2
3 Total Stocks and Bonds, per mile.....	42,811	42,376	3 43,141	42,728	3
4 Various Stocks and Bonds in Treasury, per mile.....	137	275	4 a 708		4
5 Fixed Charges, including Taxes, per mile.....	1,678	1,669	5 1,003	1,047	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	32.2	29.8	6 22.2	23	6
7 Charges ahead of Common Stock, per mile.....	1,994	1,985	7 1,564	1,555	7
8 Amount of Common Stock outstanding, per mile.....	9,203	9,203	8 16,813	15,250	8
9 Total Current Assets.....	385,116	660,901	9 319,134	985,530	9
10 Total Current Liabilities.....	475,291	572,127	10 580,845	433,153	10
11 Total Surplus.....	1,072,793	1,269,517	11 101,895	306,433	11
12 Total Surplus, per mile.....	1,675	2,006	12 201	549	12
13 Reserve Funds, for Betterments, per mile.....	87	516	13		13
<b>INCOME AND EXPENSES.</b>					
14 Gross Earnings, per mile.....	5,175	5,594	14 4,514	4,558	14
15 Percentage of Gross Earnings to Capital.....	12.1	13.2	15 10.5	10.7	15
16 Expenses, per mile.....	2,921	3,116	16 3,598	3,631	16
17 Percentage of Expenses to Gross Earnings.....	56.44	55.7	17 79.7	79.65	17
18 Net Earnings, per mile.....	2,254	2,478	18 916	927	18
19 Additional Miscellaneous Income, per mile.....	298	292	19 101	124	19
20 Expenses for Maintenance of Way and Structure, per mile.....	940	1,036	20 1,250	976	20
21 Expenses for Maintenance of Equipment, per mile.....	485	440	21 558	621	21
22 Percentage of Gross Earnings for Maintenance.....	27.5	26.4	22 40.1	35.03	22
23 Percentage of Expenses for Maintenance.....	48.8	47.3	23 50.3	44	23
24 Expenses for Conducting Transportation, per mile.....	1,329	1,446	24 1,616	1,831	24
25 General Expenses, per mile.....	167	193	25 174	203	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	28.9	29.3	26 39.6	44.62	26
27 Surplus Earnings, per mile.....	875	1,101	27 14	5	27
28 Percentage of Gross Earnings for Surplus.....	16.9	19.7	28 .3	.1	28
29 Betterments charged to Reserve Funds, per mile.....		6	29		29

a Book value.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.	MINNEAPOLIS AND ST. LOUIS.		IOWA CENTRAL.	
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.
<b>MAINTENANCE EXPENSES.</b>				
1 Maintenance of Way and Structure, per ton mile.....cents	.282	.325	1 .25	.184
2 Maintenance of Equipment, per ton mile.....cents	.146	.138	2 .112	.117
3 Maintenance of Passenger Cars, per car.....	484	496	3 807	645
4 Maintenance of Freight Cars, per car.....	34	32	4 16	40
5 Maintenance of Locomotives, per locomotive.....	a 1,376	1,410	5 1,619	2,071
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.732	.762	6 1.302	1.024
7 Maintenance of Freight Cars, per car, per mile run.....cents	.53	.533	7 .57	.463
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	4.72	4.77	8 4.74	5.14
<b>PASSENGER TRAFFIC.</b>				
9 Number of passengers carried, per mile.....	1,355	1,483	9 1,313	1,266
10 Passenger miles, per mile.....	55,054	64,556	10 33,953	37,175
11 Passenger train mileage, per mile.....	1,392	1,412	11 1,381	1,288
12 Passenger car mileage, per mile.....	6,688	6,890	12 1,942	1,629
13 Passenger car mileage, per car.....	66,149	65,098	13 61,986	63,003
14 Average number of cars, per passenger train.....	4.81	4.88	14 3.6	3.6
15 Average number of passengers, per passenger train.....	39.58	46.37	15 22.01	25.22
16 Average number of passengers, per car.....	8.23	9.5	16 6.1	7
17 Average distance traveled, per passenger.....miles	10.63	11.12	17 25.87	29.39
18 Gross earnings, per passenger.....cents	82.032	91.33	18 61.18	63.75
19 Gross earnings, per passenger, per mile traveled.....cents	2.019	2.07	19 2.365	2.237
20 Gross passenger earnings, per train mile.....cents	95.63	113	20 70.22	77.1
21 Gross passenger earnings, per car mile.....cents	19.88	23.16	21 19.5	21.12
22 Percentage of passenger expenses to earnings.....			22	

a Not including the cost of four new locomotives, \$50,768, a sum which was charged to maintenance of equipment. Were this sum included here the amount per locomotive would be \$1,897.

## Statistics of Freight Traffic.

Name of Railroad.....	MINNEAPOLIS AND ST. LOUIS.		IOWA CENTRAL.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile.....	2,790	3,065	1 3,295	3,364	1
2 Revenue ton miles, per mile.....	332,917	318,639	2 498,879	530,388	2
3 Freight train mileage, per mile.....	1,153	1,263	3 2,208	2,434	3
4 Locomotive mileage, per mile.....	3,032	3,249	4 4,920	5,154	4
5 Freight car mileage, per mile.....	28,363	28,507	5 40,711	42,321	5
6 Locomotive mileage, per locomotive.....	29,159	29,560	6 34,165	40,292	6
7 Freight car mileage, per car.....	5,812	6,837	7 7,985	5,697	7
8 Freight car mileage, per car, per day.....	16	18.7	8 21.9	15.6	8
9 Average number of all freight cars, per freight train.....	23.59	21.57	9 17.43	16.45	9
10 Average number of empty freight cars, per freight train.....	3.87	3.77	10 4.71	4.02	10
11 Percentage of loaded car mileage to total car mileage.....	81.27	83.3	11 74.46	76.9	11
12 Average revenue tons, per freight train.....	288.74	255.77	12 226.02	218.07	12
13 Average revenue tons, per loaded car.....	14.64	14.37	13 17.77	17.55	13
14 Average revenue tons, per loaded and empty car.....	12.24	11.86	14 13	13.3	14
15 Average distance of haul, per ton of freight.....miles	119.35	105.41	15 151.45	158.64	15
16 Gross earnings, per ton.....cents	136.656	130.181	16 107.378	105.97	16
17 Gross earnings, per ton, per mile hauled.....cents	1.145	1.235	17 .709	.668	17
18 Gross freight earnings, per train mile.....cents	330.54	316	18 160,225	146	18
19 Gross freight earnings, per car mile.....cents	14.01	13.37	19 9.192	8.875	19
20 Percentage of freight expenses to earnings.....			20		20
21 Principal articles of freight and percentage of tonnage from each.....	{ 43.1 ..... Grain and Flour..... 36.8 21.4 ..... Lumber..... 21.5 15.3 ..... Manufactures..... 18.9		{ 40 ..... Bituminous Coal..... 42.3 23.7 ..... Grain and Flour..... 19.2 9.6 ..... Manufactures ..... 9		21

## Statistics of Physical Condition.

Name of Railroad.....	CHICAGO GREAT WESTERN.		CHICAGO AND ALTON.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	815	816	1 902	902	1
2 Mileage owned, leased and controlled by ownership of Stock.....	930	930	2 920	920	2
3 Average mileage operated.....	930	930	3 920	920	3
4 Mileage ballasted.....			4 929	961	4
5 Mileage of various kinds of ballast.....			450.....Stone.....	515	5
			263.....Gravel.....	183	
			155.....Cinders.....	79	
			61.....Slag.....	154	
6 Mileage of second, third and fourth main tracks.....	4	4	6 156	213	6
7 Mileage of yard and side tracks.....	221	215	7 212	286	7
8 Number of ties renewed in track, per mile.....	214	344	8 662	516	8
9 Mileage of various weight rails.....	56, 60 and 75 lbs. per yd.		77.....60 lbs. per yd.....	50	9
			380.....70 lbs. per yd.....	315	
			59.....75 lbs. per yd.....	59	
			491.....80 lbs. per yd.....	586	
10 Number of Locomotives owned, per mile.....	.209	.234	10 .218	.222	10
11 Average tractive power of Locomotives.....pounds			11 .....		11
12 Number of Freight Cars owned, per mile.....	7.16	7.18	12 11.07	11.07	12
13 Average capacity of Freight Cars.....pounds			13 60.600	60.600	13
14 Number of Passenger Cars owned, per mile.....	.109	.114	14 .208	.21	14
15 Aggregate mileage of curved track.....			15 128	128	15
16 Number of curves in track.....			16 612	612	16
17 Mileage of ascending track.....			17 607	607	17
18 Average ascent per mile of ascending track.....feet			18 4.3	4.3	18
19 Aggregate length of wooden bridges.....feet			19 154	796	19

## ANALYSIS OF RAILROAD REPORTS.

75

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	CHICAGO GREAT WESTERN.		CHICAGO AND ALTON.		
Year ending .....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	43,106	47,507	1 42,486	42,486	1
2 Bonds outstanding, per mile .....	a 23,463	a 38,999	2 b 58,679	b 58,695	2
3 Total Stocks and Bonds, per mile.....	69,569	76,506	3 101,165	101,181	3
4 Various Stocks and Bonds in Treasury, per mile.....	276	356	4 c.....	c.....	4
5 Fixed Charges, including Taxes, per mile.....	a 1,715	a 1,801	5 4,482	4,244	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	23	22.2	6 45.6	42.3	6
7 Charges ahead of Common Stock, per mile.....	2,679	2,820	7 5,332	5,091	7
8 Amount of Common Stock outstanding, per mile.....	22,920	25,110	8 21,242	21,242	8
9 Total Current Assets.....	1,478,414	1,811,099	9 1,864,458	896,801	9
10 Total Current Liabilities.....	2,111,857	2,827,645	10 2,866,192	2,237,905	10
11 Total Surplus.....	746,929	837,326	11 463,071	500,157	11
12 Total Surplus, per mile.....	803	900	12 503	544	12
13 Reserve Funds, for Betterments, per mile.....			13		13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	7,546	8,122	14 9,826	10,028	14
15 Percentage of Gross Earnings to Capital.....	10.8	10.6	15 9.4	9.9	15
16 Expenses, per mile.....	5,198	5,685	16 6,085	6,518	16
17 Percentage of Expenses to Gross Earnings.....	68.9	69.99	17 61.9	65.3	17
18 Net Earnings, per mile.....	2,348	2,437	18 3,741	3,480	18
19 Additional Miscellaneous Income, per mile.....			19 1,665	1,661	19
20 Expenses for Maintenance of Way and Structure, per mile.....	999	1,031	20 1,206	1,043	20
21 Expenses for Maintenance of Equipment, per mile.....	704	813	21 952	1,132	21
22 Percentage of Gross Earnings for Maintenance.....	22.6	22.7	22 22	21.7	22
23 Percentage of Expenses for Maintenance.....	32.8	32.4	23 35.5	33.2	23
24 Expense for Conducting Transportation, per mile.....	3,053	3,387	24 3,680	4,129	24
25 General Expenses, per mile.....	438	452	25 241	245	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	46.3	47.3	26 39.9	43.6	26
27 Surplus Earnings, per mile.....	601	631	27 923	897	27
28 Percentage of Gross Earnings for Surplus.....	8	7.8	28 9.4	8.9	28
29 Betterments charged to Reserve Funds, per mile.....			29		29

a Great Western has no bonded debt. A few outstanding loans and the 4% Debenture Stock are here treated as bonds. Interest on the Debenture Stock is here treated as a fixed charge.

b Including bonds of the Chicago and Alton Railroad guaranteed by the Chicago and Alton Railway, amounting to \$34,683 per mile.

c Report not clear on this point.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	CHICAGO GREAT WESTERN.		CHICAGO AND ALTON.		
Fear ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.111	.119	1 .134	.106	1
2 Maintenance of Equipment, per ton mile.....cents	.078	.094	2 .107	.115	2
3 Maintenance of Passenger Cars, per car.....	696	721	3 1,216	881	3
4 Maintenance of Freight Cars, per car.....	33	35	4 25	28	4
5 Maintenance of Locomotives, per locomotive.....	1,625	1,752	5 2,072	2,952	5
6 Maintenance of Passenger Cars, per car, per mile run. ....cents	.73	.733	6 1.791	1.282	6
7 Maintenance of Freight Cars, per car, per mile run.... cents	.31	.302	7 .35	.38	7
8 Maintenance of Locomotives, per locomotive, per mile run... cents	4.9	5.61	8 4.56	6.21	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	1,609	1,845	9 2,558	2,713	9
10 Passenger miles, per mile.....	71,061	81,514	10 144,500	150,702	10
11 Passenger train mileage, per mile.....	2,357	2,546	11 2,979	3,030	11
12 Passenger car mileage, per mile.....	10,355	11,243	12 14,095	14,415	12
13 Passenger car mileage, per car.....	95,349	98,306	13 67,894	68,705	13
14 Average number of cars, per passenger train.....	4.4	4.4	14 4.73	4.76	14
15 Average number of passengers, per passenger train.....	30.13	32.	15 48.48	49.73	15
16 Average number of passengers, per car.....	6.9	7.36	16 10.2	10.45	16
17 Average distance travelled, per passenger.....miles	41.22	41.15	17 56.47	55.53	17
18 Gross earnings, per passenger..... cents	89.25	90.43	18 109	103	18
19 Gross earnings, per passenger, per mile travelled..... cents	2.01	2.05	19 1.94	1.86	19
20 Gross passenger earnings, per train mile..... cents	75.4	79.5	20 111	110	20
21 Gross passenger earnings, per car mile.....cents	17.2	18.1	21 23.17	23.11	21
22 Percentage of passenger expenses to earnings.....			22 .....	.....	22



## Statistics of Freight Traffic.

Name of Railroad.....	CHICAGO GREAT WESTERN.		CHICAGO AND ALTON.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Number of revenue tons carried, per mile .....	2,851	2,961	1 5,038	5,350	1
2 Revenue ton miles, per mile.....	897,031	865,632	2 894,641	981,629	2
3 Freight train mileage, per mile.....	2,864	2,974	3 3,109	3,106	3
4 Locomotive mileage, per mile.....	6,929	7,321	4 7,781	7,783	4
5 Freight car mileage, per mile.....	76,277	83,344	5 78,353	81,367	5
6 Locomotive mileage, per locomotive .....	33,217	31,232	6 45,439	47,536	6
7 Freight car mileage, per car.....	a 10,650	a 11,608	7 a 7,081	a 7,353	7
8 Freight car mileage, per car, per day.....	a 29.2	a 31.8	8 a 19.4	a 20.1	8
9 Average number of all freight cars, per freight train.....	26.6	28	9 25.2	26.2	9
10 Average number of empty freight cars, per freight train.....	.....	.....	10 8.19	8.28	10
11 Percentage of loaded car mileage to total car mileage.....	.....	.....	11 67.47	68.32	11
12 Average revenue tons, per freight train.....	313	291.1	12 287.8	315.98	12
13 Average revenue tons, per loaded car.....	.....	.....	13 16.92	17.65	13
14 Average revenue tons, per loaded and empty car.....	11.8	10.4	14 11.4	12.1	14
15 Average distance of haul, per ton of freight..... miles	314.52	292.19	15 178	183	15
16 Gross earnings, per ton..... cents	203	201	16 128	124	16
17 Gross earnings, per ton, per mile hauled..... cents	.64	.69	17 .723	.679	17
18 Gross freight earnings, per train mile..... cents	199	200	18 208	214	18
19 Gross freight earnings, per car mile..... cents	7.23	7.14	19 8.3	8.17	19
20 Percentage of freight expenses to earnings.....	.....	.....	20 .....	.....	20
21 Principal articles of freight and percentage of tonnage from each .....	.....	.....	21 .....	.....	21

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	TOLEDO, ST. LOUIS AND WESTERN.		ST. JOSEPH AND GRAND ISLAND.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	451	451	1 251	251	1
2 Mileage owned, leased and controlled by ownership of Stock.....	451	451	2 312	312	2
3 Average mileage operated.....	451	451	3 312	312	3
4 Mileage ballasted.....			4		4
5 Mileage of various kinds of ballast.....			5		5
6 Mileage of second, third and fourth main tracks.....			6		6
7 Mileage of yard and side tracks.....	107	107	7 46	46	7
8 Number of ties renewed in track, per mile.....	729	534	8		8
9 Mileage of various weight rails.....	61½ and 70 lbs. per yd.		9	52 and 60 lbs. per yd.	9
10 Number of Locomotives owned, per mile.....	.18	182	10 .096	.093	10
11 Average tractive power of Locomotives.....pounds			11		11
12 Number of Freight Cars owned, per mile.....	7.03	7.04	12 2.71	2.64	12
13 Average capacity of Freight Cars.....pounds			13		13
14 Number of Passenger Cars owned, per mile.....	.08	.078	14 .064	.064	14

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	TOLEDO, ST. LOUIS AND WESTERN.		ST. JOSEPH AND GRAND ISLAND.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>ASSETS AND LIABILITIES.</b>					
1 Stocks outstanding, per mile.....	44,346	44,346	1 43,358	43,585	1
2 Bonds outstanding, per mile.....	34,368	34,368	2 11,218	11,218	2
3 Total Stocks and Bonds, per mile.....	78,714	78,714	3 54,576	54,803	3
4 Various Stocks and Bonds in Treasury, per mile.....	.....	.....	4 .....	.....	4
5 Fixed Charges, including Taxes, per mile.....	1,362	1,506	5 603	657	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	24.6	25.7	6 13.4	15.2	6
7 Charges ahead of Common Stock, per mile.....	2,249	2,393	7 1,933	1,987	7
8 Amount of Common Stock outstanding, per mile.....	22,173	22,173	8 14,743	14,743	8
9 Total Current Assets.....	699,855	502,360	9 423,449	403,726	9
10 Total Current Liabilities.....	722,740	554,196	10 442,000	397,091	10
11 Total Surplus.....	82,556	138,247	11 226,647	234,558	11
12 Total Surplus, per mile.....	183	307	12 726	752	12
13 Reserve Funds, for Betterments, per mile.....	183	15	13 119	143	13
<b>INCOME AND EXPENSES.</b>					
14 Gross Earnings, per mile.....	5,526	5,859	14 4,484	4,323	14
15 Percentage of Gross Earnings to Capital.....	7.2	7.4	15 8.2	7.9	15
16 Expenses, per mile.....	3,994	4,249	16 2,600	2,730	16
17 Percentage of Expenses to Gross Earnings.....	72.27	72.53	17 57.98	63.15	17
18 Net Earnings, per mile.....	1,532	1,610	18 1,884	1,593	18
19 Additional Miscellaneous Income, per mile.....	14	21	19 .....	.....	19
20 Expenses for Maintenance of Way and Structure, per mile.....	803	807	20 473	499	20
21 Expenses for Maintenance of Equipment, per mile.....	711	758	21 266	357	21
22 Percentage of Gross Earnings for Maintenance.....	27.4	26.7	22 16.5	19.8	22
23 Percentage of Expenses for Maintenance.....	37.9	36.8	23 28.4	31.4	23
24 Expenses for Conducting Transportation, per mile.....	2,307	2,463	24 1,661	1,678	24
25 General Expenses, per mile.....	172	221	25 202	199	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	44.0	45.8	26 41.5	43.4	26
27 Surplus Earnings, per mile.....	183	123	27 1,283	940	27
28 Percentage of Gross Earnings for Surplus.....	3.3	2.1	28 28.6	21.7	28
29 Betterments charged to Reserve Funds, per mile.....	.....	273	29 .....	.....	29

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	TOLEDO, ST. LOUIS AND WESTERN.		ST. JOSEPH AND GRAND ISLAND.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>MAINTENANCE EXPENSES.</b>					
1 Maintenance of Way and Structure, per ton mile .....	.104	.109	1 .186	.2	1
2 Maintenance of Equipment, per ton mile .....	.092	.096	2 .105	.103	2
3 Maintenance of Passenger Cars, per car.....	586	937	3 .....	.....	3
4 Maintenance of Freight Cars, per car.....	39	39	4 .....	.....	4
5 Maintenance of Locomotives, per locomotive .....	1,859	1,848	5 915	1,387	5
6 Maintenance of Passenger Cars, per car, per mile run.....	.632	1.506	6 .....	.....	6
7 Maintenance of Freight Cars, per car, per mile run .....	.352	.389	7 .....	.....	7
8 Maintenance of Locomotives, per locomotive, per mile run.....	.....	.....	8 3.05	4.73	8
<b>PASSENGER TRAFFIC.</b>					
9 Number of passengers carried, per mile.....	1,386	1,453	9 941	882	9
10 Passenger miles, per mile.....	51,825	55,132	10 28,759	27,264	10
11 Passenger train mileage, per mile.....	1,881	1,892	11 1,191	1,192	11
12 Passenger car mileage, per mile.....	7,449	6,922	12 4,478	4,457	12
13 Passenger car mileage, per car .....	92,673	89,189	13 69,862	69,526	13
14 Average number of cars, per passenger train.....	3.92	3.66	14 3.76	3.74	14
15 Average number of passengers, per passenger train .....	27.55	29.14	15 24.17	22.88	15
16 Average number of passengers, per car.....	7.03	7.96	16 6.43	6.12	16
17 Average distance travelled, per passenger.....miles	37.4	37.95	17 30.57	30.93	17
18 Gross earnings, per passenger .....	68.29	72.83	18 71	73	18
19 Gross earnings, per passenger, per mile travelled.....	1.83	1.92	19 2.41	2.35	19
20 Gross passenger earnings, per train mile.....	66.21	71.84	20 74	70	20
21 Gross passenger earnings, per car mile.....	16.89	19.63	21 19.68	18.72	21
22 Percentage of passenger expenses to earnings.....	.....	.....	22 .....	.....	22

## Statistics of Freight Traffic.

Name of Railroad.....	TOLEDO, ST. LOUIS AND WESTERN.		ST. JOSEPH AND GRAND ISLAND.			
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.		JUNE 30, 1902.	
1 Number of revenue tons carried, per mile.....	3,549	3,693	1	2,171	2,012	1
2 Revenue ton miles, per mile.....	773,934	793,536	2	254,226	249,126	2
3 Freight train mileage, per mile.....	3,085	2,779	3	1,277	1,244	3
4 Locomotive mileage, per mile.....			4	2,795	2,698	4
5 Freight car mileage, per mile.....	77,899	70,667	5	27,229	26,441	5
6 Locomotive mileage, per locomotive.....			6	29,067	28,903	6
7 Freight car mileage, per car.....	a 11,079	a 10,038	7	a 10,066	a 10,021	7
8 Freight car mileage, per car, per day.....	a 30.4	a 27.5	8	a 27.6	a 27.4	8
9 Average number of all freight cars, per freight train.....	24.22	25.43	9	21.32	21.25	9
10 Average number of empty freight cars, per freight train.....	7.13	6.19	10	6.42	6.31	10
11 Percentage of loaded car mileage to total car mileage.....	70.6	75.7	11	69.9	70.3	11
12 Average revenue tons, per freight train.....	250.87	285.57	12	199.15	200.39	12
13 Average revenue tons, per loaded car.....	14.68	14.84	13	13.37	13.41	13
14 Average revenue tons, per loaded and empty car.....	10.4	11.2	14	9	9.4	14
15 Average distance of haul, per ton of freight.....miles	218.1	214.9	15	127.2	123.93	15
16 Gross earnings, per ton.....cents	118.28	118.78	16	159	163	16
17 Gross earnings, per ton, per mile hauled.....cents	54.2	55.3	17	1.36	1.32	17
18 Gross freight earnings, per train mile.....cents	136.07	157.85	18	270	264	18
19 Gross freight earnings, per car mile.....cents	5.62	6.31	19	12.7	12.4	19
20 Percentage of freight expenses to earnings.....			20			20
21 Principal articles of freight and percentage of tonnage from each.....	32.3. Products of Agriculture.....22.7		21 {	.....		21
	21.4.....Manufactures.....31					
	18.1.....Products of Mines.....19.3					
	12 ...Products of Forests.....13					

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	CHICAGO AND EASTERN ILLINOIS.		EVANSVILLE AND TERRA HAUTE.			
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.		
1 Mileage owned.....	704	715	1	180	180	1
2 Mileage owned, leased and controlled by ownership of Stock.....	727	738	2	6331	6331	2
3 Average mileage operated.....	a 720	a 730	3	162	162	3
4 Mileage ballasted.....			4			4
5 Mileage of various kinds of ballast.....			5			5
6 Mileage of second, third and fourth main tracks.....	106	106	6			6
7 Mileage of yard and side tracks.....	291	319	7	62	63	7
8 Number of ties renewed in track, per mile.....			8	334	569	8
9 Mileage of various weight rails.....	60, 65 and 80 lbs. per yd.		9	60, 70 and 80 lbs. per yd.		9
10 Number of Locomotives owned, per mile.....	.192	.19	10	.309	.247	10
11 Average tractive power of Locomotives..... pounds			11			11
12 Number of Freight Cars owned, per mile.....	14.12	14.37	12	22.86	20.204	12
13 Average capacity of Freight Cars..... pounds			13			13
14 Number of Passenger Cars owned, per mile.....	.169	.168	14	.235	.241	14

a Approximate.

b Including the Evansville and Indianapolis R. R.

## ANALYSIS OF RAILROAD REPORTS.

83

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	CHICAGO AND EASTERN ILLINOIS.		EVANSVILLE AND TERRE HAUTE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	19,484	19,217	1	32,696	32,696
2 Bonds outstanding, per mile.....	33,437	33,768	2	c 52,951	c 52,951
3 Total Stocks and Bonds, per mile.....	52,921	52,985	3	85,647	85,647
4 Various Stocks and Bonds in Treasury, per mile.....	a.....	a.....	4	d 14,490	e 1,952
5 Fixed Charges, including Taxes, per mile.....	2,173	2,208	5	f 3,098	f 2,961
6 Percentage of Fixed Charges and Taxes to Earnings.....	27.6	25.7	6	36	33
7 Charges ahead of Common Stock, per mile.....	2,742	2,569	7	3,494	3,357
8 Amount of Common Stock outstanding, per mile.....	9,997	9,860	8	24,613	24,613
9 Total Current Assets.....	1,948,931	2,132,642	9	492,896	679,532
10 Total Current Liabilities.....	1,164,909	1,229,419	10	223,307	225,130
11 Total Surplus.....	1,701,072	1,701,072	11	1,475,392	g 74,653
12 Total Surplus, per mile.....	2,363	2,330	12	9,107	461
13 Reserve Funds, for Betterments, per mile.....			13		
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	7,860	8,599	14	8,605	8,973
15 Percentage of Gross Earnings to Capital.....	14.9	16.2	15	10.1	10.5
16 Expenses, per mile.....	4,508	4,748	16	4,891	4,625
17 Percentage of Expenses to Gross Earnings.....	57.35	55.22	17	56.84	51.54
18 Net Earnings, per mile.....	3,352	3,851	18	3,714	4,348
19 Additional Miscellaneous Income, per mile.....	304	341	19	283	242
20 Expenses for Maintenance of Way and Structure, per mile.....	869	838	20	1,014	856
21 Expenses for Maintenance of Equipment, per mile.....	841	1,011	21	1,300	1,173
22 Percentage of Gross Earnings for Maintenance.....	21.8	21.5	22	26.9	22.6
23 Percentage of Expenses for Maintenance.....	37.9	38.9	23	49.7	43.9
24 Expenses for Conducting Transportation, per mile.....	2,576	2,668	24	2,266	2,213
25 General Expenses, per mile.....	222	232	25	311	383
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	35.6	33.7	26	29.9	28.93
27 Surplus Earnings, per mile.....	b 1,043	b 1,152	27	900	h 461
28 Percentage of Gross Earnings for Surplus.....	13.3	13.4	28	10.4	5.1
29 Betterments charged to Reserve Funds, per mile.....			29		

a No investments reported excepting in stocks representing terminals.

b After deducting \$441 per mile for betterments and depreciation in 1901 and \$832 per mile in 1902.

c Including guaranteed bonds amounting to \$15,432 per mile.

d Par value.

e Par value, excluding the stock of the Evansville and Indianapolis R. R., amounting to \$12,346 per mile.

f Including deficit of Evansville and Indianapolis on bonds guaranteed by Evansville and Terra Haute (see note c); deficit equaled \$535 per mile in 1901, and \$395 per mile in 1902.

g After readjustment of income account when stocks of the Evansville and Indianapolis were charged off (see note e).

h After deducting \$1,169 per mile for depreciation.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	CHICAGO AND EASTERN ILLINOIS.		EVANSVILLE AND TERRE HAUTE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.068	.056	1 .162	.126	1
2 Maintenance of Equipment, per ton mile.....cents	.066	.067	2 .208	.173	2
3 Maintenance of Passenger Cars, per car.....	481	383	3 116	254	3
4 Maintenance of Freight Cars, per car.....	28	36	4 39	37	4
5 Maintenance of Locomotives, per locomotive.....	1,406	1,639	5 721	928	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.....	.....	6 .....	.....	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.438	.507	7 1,694	1,435	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	6.01	7.173	8 3.56	3.596	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	1,857	5,202	9 2,145	2,231	9
10 Passenger miles, per mile.....	82,633	83,373	10 81,380	88,540	10
11 Passenger train mileage, per mile.....	1,871	1,868	11 2,245	2,256	11
12 Passenger car mileage, per mile.....	.....	.....	12 .....	.....	12
13 Passenger car mileage, per car.....	.....	.....	13 .....	.....	13
14 Average number of cars, per passenger train.....	.....	.....	14 .....	.....	14
15 Average number of passengers, per passenger train.....	44.2	44.6	15 31.8	39.2	15
16 Average number of passengers, per car.....	.....	.....	16 .....	.....	16
17 Average distance traveled, per passenger.....miles	17	16	17 37.9	39.52	17
18 Gross earnings, per passenger.....cents	27.7	27.5	18 92,549	94,279	18
19 Gross earnings, per passenger, per mile traveled.....cents	1.63	1.72	19 2,449	2,385	19
20 Gross passenger earnings, per train mile.....cents	83	88	20 110.511	111.681	20
21 Gross passenger earnings, per car mile.....cents	.....	.....	21 .....	.....	21
22 Percentage of passenger expenses to earnings.....	.....	.....	22 .....	.....	22



## Statistics of Freight Traffic.

Name of Railroad.....	CHICAGO AND EASTERN ILLINOIS.		EVANSVILLE AND TERRE HAUTE.			
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.		
1 Number of revenue tons carried, per mile.....	8,311	9,605	1	10,547	11,175	1
2 Revenue ton miles, per mile.....	1,273,170	1,502,253	2	626,413	676,844	2
3 Freight train mileage, per mile.....	a 2,613	a 2,482	3	2,447	2,461	3
4 Locomotive mileage, per mile.....	4,481	4,351	4	b 6,250	b 6,373	4
5 Freight car mileage, per mile.....	90,364	101,886	5	53,291	54,662	5
6 Locomotive mileage, per locomotive.....	23,395	22,848	6	b 20,251	b 25,811	6
7 Freight car mileage, per car.....	b 6,398	b 7,102	7	b 2,331	b 2,578	7
8 Freight car mileage, per car, per day.....	b 17.5	b 19.5	8	b 6.39	b 7.1	8
9 Average number of all freight cars, per freight train.....	34.6	41.05	9	21.78	22.21	9
10 Average number of empty freight cars, per freight train.....	12.8	15.6	10	6.48	6.54	10
11 Percentage of loaded car mileage to total car mileage.....	63	62.1	11	70	70.6	11
12 Average revenue tons, per freight train.....	a 187.4	a 605.2	12	256	275	12
13 Average revenue tons, per loaded car.....	22.4	23.8	13	16.7	17.6	13
14 Average revenue tons, per loaded and empty car.....	14	14.7	14	11.8	12.4	14
15 Average distance of haul, per ton of freight..... miles	155	156.4	15	59.23	60.4	15
16 Gross earnings, per ton.....cents	76.4	71.9	16	51.542	51.245	16
17 Gross earnings, per ton, per mile hauled.....cents	.493	.459	17	.87	.818	17
18 Gross freight earnings, per train mile.....cents	a 240	a 278	18	222.121	233.723	18
19 Gross freight earnings, per car mile.....cents	6.94	6.77	19	10.199	10.48	19
20 Percentage of freight expenses to earnings.....			20			20
21 Principal articles of freight and percentage of tonnage from each.....			21			21

a Switching and helping engine mileage is included in freight train mileage.  
 b Report not clear on this point.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.....	ILLINOIS CENTRAL.		CHICAGO, INDIANAPOLIS AND LOUISVILLE.	
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.
1 Mileage owned.....	4,266	4,284	1 509	509
2 Mileage owned, leased and controlled by ownership of Stock. ....	4,266	4,284	2 546	546
3 Average mileage operated.....	4,215	4,276	3 535	535
4 Mileage ballasted.....			4 432	478
5 Mileage of various kinds of ballast.....			5 { 324.....Gravel.....364	5 { 364
			77.....Stone.....83	83
			31.....Cinders.....31	31
6 Mileage of second, third and fourth main tracks.....	338	535	6	6
7 Mileage of yard and side tracks.....	1,333	1,370	7 163	170
8 Number of ties renewed in track, per mile.....	471	429	8 395	373
9 Mileage of various weight rails.....	1,214... 60 lbs. per yd ... 1,165	1,535... 76 lbs. per yd ... 1,370	9 { 143.....56-60 lbs. per yd..... 40	9 { 150
	794... 85 lbs. per yd ... 1,084		153.....67 lbs. per yd..... 150	150
	Balance 50-100 lbs. per yd.		213.....75 lbs. per yd..... 239	239
10 Number of Locomotives owned, per mile.....	.211	.221	10 .161	.174
11 Average tractive power of Locomotives..... pounds	24,705	25,860	11	11
12 Number of Freight Cars owned, per mile.....	9.13	10.15	12 10.65	10.92
13 Average capacity of Freight Cars..... pounds	58,860	61,720	13	13
14 Number of Passenger Cars owned, per mile.....	.172	.17	14 .151	.153

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	ILLINOIS CENTRAL.		CHICAGO, INDIANAPOLIS AND LOUISVILLE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>ASSETS AND LIABILITIES.</b>					
1 Stocks outstanding, per mile.....	18,042	<i>d</i> 20,861	1 28,972	28,972	1
2 Bonds outstanding, per mile.....	29,819	30,214	2 25,425	25,872	2
3 Total Stocks and Bonds, per mile.....	47,921	51,075	3 54,397	54,844	3
4 Various Stocks and Bonds in Treasury, per mile.....	<i>a</i> 9,915	<i>a</i> 10,071	4 3,455	3,605	4
5 Fixed Charges, including Taxes, per mile.....	1,942	1,949	5 2,188	2,177	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	22.2	20.4	6 28.2	25.4	6
7 Charges ahead of Common Stock, per mile.....	1,942	1,949	7 2,562	2,551	7
8 Amount of Common Stock outstanding, per mile.....	15,669	18,522	8 19,626	19,626	8
9 Total Current Assets.....	5,130,362	10,730,880	9 1,110,143	1,118,622	9
10 Total Current Liabilities.....	8,950,835	9,199,811	10 1,193,322	1,206,342	10
11 Total Surplus.....	<i>b</i> 2,960,960	<i>b</i> 3,010,960	11 1,397,583	1,978,758	11
12 Total Surplus, per mile.....	702	704	12 2,612	3,699	12
13 Reserve Funds, for Betterments, per mile.....	155	85	13 298	144	13
<b>INCOME AND EXPENSES.</b>					
14 Gross Earnings, per mile.....	8,755	9,546	14 7,751	8,556	14
15 Percentage of Gross Earnings to Capital.....	18.3	18.7	15 14.2	15.6	15
16 Expenses, per mile.....	5,754	6,138	16 4,599	4,971	16
17 Percentage of Expenses to Gross Earnings.....	65.7	64.3	17 59.34	58.1	17
18 Net Earnings, per mile.....	3,001	3,408	18 3,152	3,585	18
19 Additional Miscellaneous Income, per mile.....	594	831	19 254	242	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,390	1,321	20 979	1,016	20
21 Expenses for Maintenance of Equipment, per mile.....	1,037	1,242	21 964	1,063	21
22 Percentage of Gross Earnings for Maintenance.....	27.7	26.8	22 25.1	24.3	22
23 Percentage of Expenses for Maintenance.....	42.2	41.8	23 42.2	41.8	23
24 Expenses for Conducting Transportation, per mile.....	3,137	3,377	24 2,126	2,355	24
25 General Expenses, per mile.....	189	198	25 534	537	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	38	37.5	26 34.5	33.8	26
27 Surplus Earnings, per mile.....	<i>c</i> 966	<i>c</i> 1,275	27 1,220	1,656	27
28 Percentage of Gross Earnings for Surplus.....	11	13.4	28 15.7	19.4	28
29 Betterments charged to Reserve Funds, per mile.....	92	63	29 668	700	29

*a* Book value.*b* Does not include Insurance Fund, Surplus Dividend Fund, nor Pension Fund, all three amounting to \$632 per mile in 1901 and \$636 per mile in 1902.*c* From this, there were set apart for betterments \$687 per mile in 1901 and \$1,015 per mile in 1902.*d* There has since the fiscal year closed been an issue of additional stock amounting to \$3,467 per mile.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of—Maintenance—Passenger Traffic.

Name of Railroad.....	ILLINOIS CENTRAL.		CHICAGO, INDIANAPOLIS AND LOUISVILLE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>MAINTENANCE EXPENSES.</b>					
1 Maintenance of Way and Structure, per ton mile.....cents	.146	.127	1 .146	.129	1
2 Maintenance of Equipment, per ton mile.....cents	.109	.119	2 .144	.135	2
3 Maintenance of Passenger Cars, per car.....	493	737	3 790	840	3
4 Maintenance of Freight Cars, per car.....	53	58	4 38	38	4
5 Maintenance of Locomotives, per locomotive.....	1,759	1,971	5 2,364	2,655	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.69	1.02	6 1.109	1.150	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.5	.61	7 .668	.615	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	3.92	5.29	8 6.412	7.248	8
<b>PASSENGER TRAFFIC.</b>					
9 Number of passengers carried, per mile.....	4,239	4,445	9 2,182	2,411	9
10 Passenger miles, per mile.....	88,713	93,847	10 98,681	105,030	10
11 Passenger train mileage, per mile.....	2,568	2,564	11 2,160	2,254	11
12 Passenger car mileage, per mile.....	12,041	12,195	12 10,784	11,186	12
13 Passenger car mileage, per car.....	70,002	71,827	13 71,224	72,659	13
14 Average number of cars, per passenger train.....	4.7	4.8	14 5	4.9	14
15 Average number of passengers, per passenger train.....	34.54	36.6	15 45.69	46.6	15
16 Average number of passengers, per car.....	7.35	7.63	16 9.14	9.5	16
17 Average distance travelled, per passenger.....miles	20.93	21.11	17 45.22	43.56	17
18 Gross earnings, per passenger.....cents	41.02	42.2	18 87.39	86.09	18
19 Gross earnings, per passenger, per mile travelled.....cents	1.96	1.999	19 1.932	1.976	19
20 Gross passenger earnings, per train mile.....cents	84.66	91.34	20 111	114	20
21 Gross passenger earnings, per car mile.....cents	18.06	18.03	21 22.2	23.27	21
22 Percentage of passenger expenses to earnings.....			22		22

## Statistics of Freight Traffic.

Name of Railroad.....	ILLINOIS CENTRAL.		CHICAGO, INDIANAPOLIS AND LOUISVILLE.			
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.		JUNE 30, 1902.	
1 Number of revenue tons carried, per mile.....	1,308	1,466	1	1,437	1,919	1
2 Revenue ton miles, per mile.....	952,508	1,041,121	2	668,611	787,138	2
3 Freight train mileage, per mile.....	b 4,051	b 3,790	3	2,296	2,515	3
4 Locomotive mileage, per mile.....	8,418	8,011	4	5,927	6,367	4
5 Freight car mileage, per mile.....	91,572	92,307	5	60,577	67,462	5
6 Locomotive mileage, per locomotive.....	39,821	36,170	6	36,869	36,629	6
7 Freight car mileage, per car.....	a 10,026	a 9,305	7	a 5,688	a 6,175	7
8 Freight car mileage, per car, per day.....	a 27	a 25.5	8	a 15.6	a 16.9	8
9 Average number of all freight cars, per freight train.....	22.6	24.36	9	26.39	26.82	9
10 Average number of empty freight cars, per freight train.....	6.32	5.89	10	7.86	7.7	10
11 Percentage of loaded car mileage to total car mileage.....	72.1	75.8	11	70.23	71.3	11
12 Average revenue tons, per freight train.....	235.18	274.75	12	291.24	313.06	12
13 Average revenue tons, per loaded car.....	14.44	14.88	13	15.72	16.37	13
14 Average revenue tons, per loaded and empty car.....	10.4	11.3	14	11.04	11.67	14
15 Average distance of haul, per ton of freight.....miles	226.4	233.14	15	151	160	15
16 Gross earnings, per ton.....cents	140	145	16	120	121	16
17 Gross earnings, per ton, per mile hauled.....cents	.619	.622	17	.797	.757	17
18 Gross freight earnings, per train mile.....cents	145.67	171.01	18	232	237	18
19 Gross freight earnings, per car mile.....cents	6.445	7.02	19	8.783	8.84	19
20 Percentage of freight expenses to earnings.....			20			20
21 Principal articles of freight and percentage of tonnage from each.....			21	22.5 .... Stone, Sand, etc..... 23.7 15 .... Lumber..... 15 13.1 .... Bituminous Coal..... 12.3 10.3 .... Grain and Flour..... 8.8 15.8 .... Manufactures.... 18		21

a Report not clear on this point.

b Freight train mileage and the statistics dependent thereon included in 1901, the mileage of helping engines and 75% of mixed train mileage; but in 1902, mixed train mileage is all included and helping engine mileage is excluded, to conform to the rules of the Interstate Commerce Commission.

## Statistics of Physical Condition.

Name of Railroad.....	BALTIMORE & OHIO.		CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Mileage owned.....	3,221	3,234	1 1,891	1,891	1
2 Mileage owned, leased and controlled by ownership of Stock.....	3,221	4,340	2 2,287	2,287	2
3 Average mileage operated.....	3,216	3,234	3 1,891	1,891	3
4 Mileage ballasted.....			4		4
5 Mileage of various kinds of ballast.....			5		5
6 Mileage of second and additional main track.....	810	904	6 80	102	6
7 Mileage of yards and sidings.....	1,191	1,591	7 941	983	7
8 Number of ties renewed in track, per mile.....	524	566	8		8
9 Mileage of various weight rails.....	67 to 100 lbs. per yd.		9	67 to 80 lbs. per yd.	9
10 Number of Locomotives owned, per mile.....	.423	.404	10 .236	.238	10
11 Average tractive power of Locomotives.....pounds	25,239	26,316	11		11
12 Number of Freight Cars owned, per mile.....	19.39	21.78	12 10	9.97	12
13 Average capacity of Freight Cars.....pounds	59,807	62,450	13		13
14 Number of Passenger Cars owned, per mile.....	.283	.286	14 .207	.218	14

## ANALYSIS OF RAILROAD REPORTS.

91

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	BALTIMORE AND OHIO.		CLEVELAND, CINCINNATI, CHICAGO AND ST. LOU S.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	32,451	<i>f</i> 41,854	1 20,312	20,312	1
2 Bonds outstanding, per mile.....	<i>b</i> 65,819	<i>b</i> 72,088	2 31,023	30,769	2
3 Total Stocks and Bonds, per mile.....	98,270	113,942	3 51,335	51,081	3
4 Various Stocks and Bonds in Treasury, per mile.....	<i>c</i> 8,307	<i>c</i> 7,772	4 2,043	2,177	4
5 Fixed Charges including Taxes, per mile.....	2,887	<i>a</i> 3,492	5 1,880	1,833	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	19.8	22.1	6 19.9	18.5	6
7 Charges ahead of Common Stock, per mile.....	3,656	4,234	7 2,144	2,097	7
8 Amount of Common Stock outstanding, per mile.....	13,993	<i>f</i> 23,499	8 14,802	14,802	8
9 Total Current Assets.....	15,591,429	28,528,263	9 2,760,257	2,700,393	9
10 Total Current Liabilities.....	21,111,385	21,632,689	10 3,457,079	4,710,105	10
11 Total Surplus.....	1,706,719	2,625,222	11 1,407,708	1,438,681	11
12 Total Surplus, per mile.....	531	812	12 763	761	12
13 Reserve Funds, for Betterments, per mile.....			13 27	10	13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	14,649	15,827	14 9,454	9,898	14
15 Percentage of Gross Earnings to Capital.....	14.9	13.9	15 18.4	19.4	15
16 Expenses, per mile.....	9,653	10,171	16 6,408	6,917	16
17 Percentage of Expenses to Gross Earnings.....	65.9	64.3	17 67.8	69.9	17
18 Net Earnings, per mile.....	4,996	5,656	18 3,046	2,981	18
19 Additional Miscellaneous Income, per mile.....	286	708	19 67	41	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,779	1,939	20 1,197	1,329	20
21 Expenses for Maintenance of Equipment, per mile.....	1,898	2,077	21 1,369	1,496	21
22 Percentage of Gross Earnings for Maintenance.....	25	25.4	22 27.1	28.6	22
23 Percentage of Expenses for Maintenance.....	38.1	39.5	23 40	40.8	23
24 Expenses for Conducting Transportation, per mile.....	5,165	5,349	24 3,665	3,516	24
25 General Expenses, per mile.....	812	804	25 176	175	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	40.8	38.9	26 40.6	41.3	26
27 Surplus Earnings, per mile.....	<i>d</i> 1,523	<i>d</i> 2,016	27 <i>e</i> 933	<i>e</i> 873	27
28 Percentage of Gross Earnings for Surplus.....	10.4	12.7	28 9.9	8.8	28
29 Betterments charged to Reserve Funds, per mile.....			29		29

*a* Includes discount and commission on securities sold, amounting to \$321 per mile.*b* Including debenture 4 per cent. bonds, convertible into common stock amounting to \$2,582 per mile in 1901, and \$2,023 per mile in 1902.*c* At book value.*d* After deducting \$852 per mile for betterments in 1901, and \$855 per mile in 1902.*e* After deducting \$300 per mile for betterments in 1901 and \$317 per mile in 1902.*f* Since the close of the fiscal year, additional common stock has been issued—\$13,142 per mile.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	BALTIMORE AND OHIO.		CLEVELAND, CINCINNATI, CHICAGO AND ST. LOUIS.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.08	.084	1 .119	.125	1
2 Maintenance of Equipment, per ton mile.....cents	.085	.09	2 .136	.141	2
3 Maintenance of Passenger Cars, per car .....	647	637	3 1,049	1,066	3
4 Maintenance of Freight Cars, per car.....	38	38	4 47	46	4
5 Maintenance of Locomotives, per locomotive.....	1,763	2,043	5 2,176	2,813	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	1.018	.992	6 2.173	2.167	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.42	.485	7 .529	.522	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	4.87	5.59	8 .....	.....	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile .....	3,626	3,727	9 2,931	3,007	9
10 Passenger miles, per mile.....	142,505	152,256	10 137,102	154,599	10
11 Passenger train mileage, per mile.....	3,528	3,595	11 2,754	2,908	11
12 Passenger car mileage, per mile.....	17,957	18,373	12 10,006	10,745	12
13 Passenger car mileage, per car.....	63,556	64,241	13 48,269	49,200	13
14 Average number of cars, per passenger train.....	5.1	5.1	14 3.63	3.7	14
15 Average number of passengers, per passenger train.....	40.4	42	15 50	53	15
16 Average number of passengers, per car.....	7.9	8.2	16 13.8	14.3	16
17 Average distance travelled, per passenger.....miles	39.3	40.86	17 46.8	51.4	17
18 Gross earnings, per passenger.....cents	78	82.35	18 89.9	96.5	18
19 Gross earnings, per passenger, per mile travelled.....cents	1.975	2.016	19 1.921	1.878	19
20 Gross passenger earnings, per train mile.....cents	99.2	107.36	20 114.82	118.7	20
21 Gross passenger earnings, per car mile.....cents	19.45	21.05	21 31.63	32.08	21
22 Percentage of passenger expenses to earnings.....	.....	.....	22 .....	.....	22



## Statistics of Freight Traffic.

Name of Railroad.....	BALTIMORE AND OHIO.		CLEVELAND, CINCINNATI, CHICAGO AND ST. LOUIS.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Number of revenue tons carried, per mile.....	10,436	11,972	1 5,869	6,376	1
2 Revenue ton miles, per mile.....	2,220,428	2,318,085	2 1,009,565	1,061,192	2
3 Freight train mileage, per mile.....	5,812	5,702	3 3,036	3,201	3
4 Locomotive mileage, per mile.....	15,323	14,765	4 .....	.....	4
5 Freight car mileage, per mile.....	174,077	172,631	5 89,322	87,786	5
6 Locomotive mileage, per locomotive.....	36,208	36,547	6 .....	.....	6
7 Freight car mileage, per car.....	a 8,979	a 7,926	7 a 10,406	a 8,808	7
8 Freight car mileage, per car, per day....	a 24.6	a 21.7	8 a 28.5	a 21.1	8
9 Average number of all freight cars, per freight train.....	29.8	30.28	9 28.1	27.4	9
10 Average number of empty freight cars, per freight train .....	10.16	10.09	10 6.1	5.6	10
11 Percentage of loaded car mileage to total car mileage.....	65.9	66.78	11 78.5	79.4	11
12 Average revenue tons, per freight train.....	381	406.53	12 333	332	12
13 Average revenue tons, per loaded car.....	19.4	20.14	13 14.93	15.27	13
14 Average revenue tons, per loaded and empty car.....	12.9	13.4	14 11.7	12.1	14
15 Average distance of haul, per ton of freight.....miles	213	193.63	15 172	166.0	15
16 Gross earnings, per ton.....cents	106	99.65	16 104.9	98.9	16
17 Gross earnings, per ton, per mile hauled.....cents	.498	.515	17 .61	.592	17
18 Gross freight earnings, per train mile.....cents	190.1	209.22	18 203	197	18
19 Gross freight earnings, per car mile.....cents	6.38	6.91	19 7.148	7.19	19
20 Percentage of freight expenses to earnings. ....	.....	.....	20 .....	.....	20
21 Principal articles of freight and percentage of tonnage from each.....	50.2 Bituminous Coal and Coke. 52.5 15.9 ..... Manufactures..... 17 7 ..... Grain and Flour..... 4.4		..... ..... .....		21

a Report not clear on this point.

## ANALYSIS OF RAILROAD REPORTS.

## PENNSYLVANIA SYSTEM.

Statistics are not furnished in enough detail to allow of a single analysis of the entire Pennsylvania system of 10,485 miles.

The Pennsylvania Railroad proper includes all the lines directly operated east of Pittsburgh and Erie.

The system west of Pittsburgh and Erie is composed of the lines of the Pennsylvania Company, the Pittsburgh, Cincinnati, Chicago and St. Louis Railway, and about 1,500 miles of other roads.

In the following tables, as most representative of the whole system, the lines of the Pennsylvania Company, the Pittsburgh, Cincinnati, Chicago and St. Louis Railway and the Pennsylvania Railroad are separately analyzed. The latter company does not publish full details for 1901—therefore the 1900 report alone is used.

The Pennsylvania Railroad owns the entire capital stock of the Pennsylvania Company. The Pennsylvania Company, in turn, owes a controlling interest in the Pittsburgh, Cincinnati, Chicago, and St. Louis Railway.

The Pennsylvania Railroad, therefore, receives, as miscellaneous income, revenue from the entire system.

## Statistics of Physical Condition.

Name of Railroad.....	PITTSBURGH, CINCINNATI, CHICAGO AND ST. LOUIS.		PENNSYLVANIA COMPANY.		PENNSYLVANIA RAILROAD.
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.
1 Mileage owned.....	1,407	1,407	1,396	1,396	539
2 Mileage owned, leased and controlled by ownership of Stock.....	1,407	1,407	1,396	1,396	4,698
3 Average mileage operated .....	1,407	1,407	1,396	1,396	2,959
4 Mileage ballasted .....					
5 Mileage of various kinds of ballast.....					
6 Mileage of second, third and fourth main tracks .....	278	278	336	336	1,516
7 Mileage of yard and side tracks.....	585	585	816	816	1,920
8 Number of ties renewed in track, per mile .....					7,547
9 Mileage of various weight rails.....	60, 70 and 85 lbs. per yd.		60 to 85 lbs. per yd.		56 to 100 lbs. per yd.
10 Number of Locomotives owned, per mile.....	429		391	394	7,518
11 Average tractive power of Locomotives..... pounds			22,157	22,981	20,834
12 Number of Freight Cars owned, per mile.....	9,889		27,12	27.8	22,204
13 Average capacity of Freight Cars .....			72,874	71,231	60,988
14 Number of Passenger Cars owned, per mile.....	302		35	352	4,488

<sup>a</sup> Lines directly operated only, excluding the Buffalo and Allegheny Valley division (690 miles), which was operated for only six months of the year.

<sup>b</sup> Including the Buffalo and Allegheny Valley division.

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	PITTSBURGH, CINCINNATI, CHICAGO AND ST. LOUIS.		PENNSYLVANIA COMPANY.		PENNSYLVANIA RAILROAD.
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.
<b>ASSETS AND LIABILITIES.</b>					
1 Stocks outstanding, per mile.....	31,052	34,130	1 15,013	28,653	41,530
2 Bonds outstanding, per mile.....	33,202	32,484	2 17,534	17,537	29,957
3 Total Stocks and Bonds, per mile.....	67,254	66,614	3 32,577	46,190	71,487
4 Various Stocks and Bonds in Treasury, per mile.....	1,110	1,714	4 c 29,704	c 66,173	d 46,121
5 Fixed Charges, including Taxes, per mile.....	3,154	3,134	5 6,072	6,832	5,388
6 Percentage of Fixed Charges and Taxes to Earnings.....	19.9	18.2	6 33.2	32.8	22.5
7 Charges ahead of Common Stock, per mile.....	3,199	3,779	7 6,072	6,832	5,388
8 Amount of Common Stock outstanding, per mile.....	17,516	17,594	8 15,043	28,653	41,530
9 Total Current Assets.....	5,299,076	4,754,179	9 8,069,675	8,034,772	20,065,954
10 Total Current Liabilities.....	3,890,500	5,765,276	10 8,855,539	12,600,713	28,399,345
11 Total Surplus.....	3,664,861	3,678,731	11 5,176,318	5,330,856	e 22,485,304
12 Total Surplus, per mile.....	2,604	2,615	12 3,708	3,819	6,164
13 Reserve Funds, for Betterments, per mile.....			13 3,388	3,949	822
<b>INCOME AND EXPENSES.</b>					
14 Gross Earnings, per mile.....	15,884	17,264	14 18,288	20,813	28,497
15 Percentage of Gross Earnings to Capital.....	23.5	25.9	15 56.1	45.1	33
16 Expenses, per mile.....	11,134	11,668	16 12,261	13,855	18,599
17 Percentage of Expenses to Gross Earnings.....	70.4	67.6	17 68.8	66.6	65.25
18 Net Earnings, per mile.....	4,690	5,596	18 6,027	6,958	9,838
19 Additional Miscellaneous Income, per mile.....	156	193	19 1,659	2,511	1,779
20 Expenses for Maintenance of Way and Structure, per mile.....	2,242	2,197	20 2,883	3,209	3,599
21 Expenses for Maintenance of Equipment, per mile.....	2,803	3,026	21 2,765	3,255	4,384
22 Percentage of Gross Earnings for Maintenance.....	31.9	30.3	22 30.7	31.1	28
23 Percentage of Expenses for Maintenance.....	45.3	44.8	23 45.3	46.7	43
24 Expenses for Conducting Transportation, per mile.....	5,823	6,158	24 6,306	7,009	10,239
25 General Expenses, per mile.....	265	285	25 309	381	437
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	38.5	37.3	26 36.2	35.5	37
27 Surplus Earnings, per mile.....	a 1,034	a 1,342	27 6802	b 16,581	4,736
28 Percentage of Gross Earnings for Surplus.....	6.5	7.8	28 4.1	8	20
29 Betterments charged to Reserve Funds, per mile.....			29		

a After deducting \$659 per mile in 1900 and \$1,293 per mile in 1901, for betterments, etc.

b After deducting \$716 per mile in 1900 and \$947 per mile in 1901, for betterments, etc.

c Including securities of roads in this company. Report not clear enough to allow of their exclusion.

d Cost to Company.

e Exclusive of sinking funds of \$10,173,635.

f Assets and Liabilities include Buffalo and Allegheny Valley division.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	PITTSBURGH, CINCINNATI, CHICAGO AND ST. LOUIS.		PENNSYLVANIA COMPANY.		PENNSYLVANIA RAILROAD.
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901	DECEMBER 31, 1900.
<b>MAINTENANCE EXPENSES.</b>					
1 Maintenance of Way and Structure, per ton mile.....cents	.129	.113	1 .124	.119	.092
2 Maintenance of Equipment, per ton mile.....cents	.162	.156	2 .119	.12	.113
3 Maintenance of Passenger Cars, per car.....			3 791	843	781
4 Maintenance of Freight Cars, per car.....			4 53	56	78
5 Maintenance of Locomotives, per locomotive.....			5 2,391	3,060	2,291
6 Maintenance of Passenger Cars, per car, per mile run.....cents			6 1.454	1.421	1.645
7 Maintenance of Freight Cars, per car, per mile run.....cents			7 .781	.805	.711
8 Maintenance of Locomotives, per locomotive, per mile run.....cents			8 5.76	7.26	5.81
<b>PASSENGER TRAFFIC.</b>					
9 Number of passengers carried, per mile.....	5,839	6,016	9 5,263	5,793	13,735
10 Passenger miles, per mile.....	173,541	175,696	10 144,341	158,244	299,526
11 Passenger train mileage, per mile.....	4,099	4,195	11 3,585	4,092	5,487
12 Passenger car mileage, per mile.....			12 18,389	20,736	28,545
13 Passenger car mileage, per car.....			13 52,605	58,752	47,478
14 Average number of cars, per passenger train.....			14 5.1	5.1	5.2
15 Average number of passengers, per passenger train.....	42	42	15 40	39	55
16 Average number of passengers, per car.....			16 7.8	7.6	10.6
17 Average distance travelled, per passenger.....miles	29.72	29.2	17 27.43	27.32	21.8
18 Gross earnings, per passenger.....cents	60.4	60.1	18 57.4	58	43.2
19 Gross earnings, per passenger, per mile travelled.....cents	2.03	2.06	19 2.09	2.12	1.98
20 Gross passenger earnings, per train mile.....cents	115.4	116.3	20 111.8	107.8	131.4
21 Gross passenger earnings, per car mile.....cents			21 21.92	21.14	25.27
22 Percentage of passenger expenses to earnings.....	89.3	88.8	22 94.7	96.5	73.4

## Statistics of Freight Traffic.

Name of Railroad.....	PITTSBURGH, CINCINNATI, CHICAGO AND ST. LOUIS.		PENNSYLVANIA COMPANY.		PENNSYLVANIA RAILROAD.
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.
Year ending.....					
1 Number of revenue tons carried, per mile.....	13,542	18,528	1 29,895	36,054	35,217
2 Revenue ton miles, per mile....	1,727,273	1,938,677	2 2,330,306	2,706,034	3,896,647
3 Freight train mileage, per mile.....	6,394	6,455	3 6,388	6,842	8,054
4 Locomotive mileage, per mile.....			4 14,899	16,483	19,879
5 Freight car mileage, per mile.....	158,105	172,542	5 177,545	189,801	198,225
6 Locomotive mileage, per locomotive.....			6 38,092	41,836	39,424
7 Freight car mileage, per car.....	a 15,989		7 a 6,547	a 6,827	a 10,977
8 Freight car mileage, per car, per day.....	a 43.8		8 a 17.9	a 18.7	a 30
9 Average number of all freight cars, per freight train.....	25.12	26.73	9 26.85	27.74	24.6
10 Average number of empty freight cars, per freight train.....	7.32	7.93	10 7.34	7.87	9.1
11 Percentage of loaded car mileage to total car mileage.....	71.3	70.3	11 70.2	72	62.9
12 Average revenue tons, per freight train.....	274.44	300.36	12 364.75	393.49	483.8
13 Average revenue tons, per loaded car.....	15.41	15.97	13 18.7	19.9	31.2
14 Average revenue tons, per loaded and empty car.....	10.9	11.2	14 13.6	14.2	19.7
15 Average distance of haul, per ton of freight.....miles	111.14	104.63	15 77.95	75.05	110.65
16 Gross earnings, per ton.....cents	69.8	64.8	16 45.7	43.6	59.7
17 Gross earnings, per ton, per mile hauled.....cents	.62	.62	17 .59	.58	.539
18 Gross freight earnings, per train mile.....cents	170.9	186	18 213.9	230	260.9
19 Gross freight earnings, per car mile.....cents	6.8	6.96	19 7.97	8.29	10.6
20 Percentage of freight expenses to earnings.....	77.4	73.9	20 71.8	70	67
21 Principal articles of freight and percentage of tonnage from each.....	39.5.....b Coal and Coke....37 27.4.....Manufactures.....27		21 { 36.8.....b Coal and Coke ....35.8 28.5.....Ore, Stone, Sand, etc....26.6 22 ..... Manufactures.....25.3		43.4.b Coal and Coke. 13.4.Anthracite.

a Report not clear on this point.  
b Bituminous coal.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.	LAKE SHORE AND MICHIGAN SOUTHERN.		MICHIGAN CENTRAL (including Canada Southern).	
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
1 Mileage owned.	1,091	1,091	1 1,635	1,658
2 Mileage owned, leased and controlled by ownership of Stock.	1,411	1,411	2 1,635	1,658
3 Average mileage operated.	1,411	1,411	3 1,635	1,658
4 Mileage ballasted.	Whole system.		4	1,644
5 Mileage of various kinds of ballast.	All gravel ballast.		.....Gravel.....1,014	
			.....Sand.....441	
			.....Cinders.....166	
6 Mileage of second, third and fourth main tracks.	522	532	6 262	308
7 Mileage of yard and side tracks.	799	838	7 969	1,024
8 Number of ties renewed in track, per mile.	487	536	8 430	407
9 Mileage of various weight rails.	60 to 80 lbs. per yd.		56 to 80 lbs. per yd.	
			9	
10 Number of Locomotives owned, per mile.	.371	.412	10 .282	.278
11 Average tractive power of Locomotives..... pounds		21,000	11	17,935
12 Number of Freight Cars owned, per mile.	14.14	13.38	12 8.53	8.37
13 Average capacity of Freight Cars..... pounds		60,000	13	51,300
14 Number of Passenger Cars owned, per mile.	.305	.305	14 .231	.227

## Statistics of—Assets and Liabilities—Income and Expense.

Name of Railroad.....	LAKE SHORE AND MICHIGAN SOUTHERN.		MICHIGAN CENTRAL (including Canada Southern).			
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.		
<b>ASSETS AND LIABILITIES.</b>						
1 Stocks outstanding, per mile.....	35,436	35,436	1 20,635	20,349	1	
2 Bonds outstanding, per mile.....	35,950	35,971	2 25,680	25,528	2	
3 Total Stocks and Bonds, per mile.....	71,386	71,407	3 46,315	45,877	3	
4 Various Stocks and Bonds in Treasury, per mile.....	a 19,021	a 20,899	4 4,145	4,224	4	
5 Fixed Charges, including Taxes, per mile.....	2,303	2,294	5 c 1,940	c 2,014	5	
6 Percentage of Fixed Charges and Taxes to Earnings.....	12.3	11.1	6 19	18.1	6	
7 Charges ahead of Common Stock, per mile.....	2,303	2,294	7 1,940	2,014	7	
8 Amount of Common Stock outstanding, per mile.....	35,058	35,058	8 11,461	11,302	8	
9 Total Current Assets.....	5,157,133	5,138,222	9 2,711,916	2,936,742	9	
10 Total Current Liabilities.....	11,685,268	10,328,603	10 3,164,238	3,090,825	10	
11 Total Surplus.....	11,248,633	14,794,067	11 7,251,841	7,277,690	11	
12 Total Surplus, per mile.....	7,972	10,482	12 4,435	4,389	12	
13 Reserve Funds, for Betterments, per mile.....			13 49	179	13	
<b>INCOME AND EXPENSES.</b>						
14 Gross Earnings, per mile.....	18,753	20,744	14 10,232	11,152	14	
15 Percentage of Gross Earnings to Capital.....	26.3	29.1	15 22.1	24.3	15	
16 Expenses, per mile.....	11,762	13,820	16 7,806	8,587	16	
17 Percentage of Expenses to Gross Earnings.....	62.7	66.6	17 76.3	77	17	
18 Net Earnings, per mile.....	6,091	6,924	18 2,426	2,565	18	
19 Additional Miscellaneous Income, per mile.....	531	942	19 28	42	19	
20 Expenses for Maintenance of Way and Structure, per mile.....	2,190	2,405	20 1,617	2,076	20	
21 Expenses for Maintenance of Equipment, per mile.....	b 2,875	b 4,184	21 1,472	1,608	21	
22 Percentage of Gross Earnings for Maintenance.....	27	31.8	22 30.2	33.6	22	
23 Percentage of Expenses for Maintenance.....	43.1	47.7	23 39.4	43.6	23	
24 Expenses for Conducting Transportation, per mile.....	6,442	6,948	24 4,507	4,677	24	
25 General Expenses, per mile.....	257	285	25 209	167	25	
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	35.7	34.9	26 46.1	43.4	26	
27 Surplus Earnings, per mile.....	4,719	5,071	27 514	593	27	
28 Percentage of Gross Earnings for Surplus.....	25.2	24.4	28 5	5.3	28	
29 Betterments charged to Reserve Funds, per mile.....			29	49	29	

a Book value.

b Including cost of new equipment, \$1,603 per mile in 1900; \$2,544 per mile in 1901.

c Including that portion of the net surplus belonging to Canada Southern, \$184 per mile in 1900 and \$226 per mile in 1901. This sum is applicable to dividends on Canada Southern Stock.

The Statistics of Assets and Liabilities of Canada Southern and Michigan Central have been carefully consolidated. All other statistics are consolidated in the reports made by Michigan Central.



## Statistics of—Maintenance—Passenger Traffic.

Name of Railroad.....	LAKE SHORE AND MICHIGAN SOUTHERN.		MICHIGAN CENTRAL (including Canada Southern).		
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile .....	.085	.085	1 .132	.166	1
2 Maintenance of Equipment, per ton mile .....	.049	.058	2 .12	.133	2
3 Maintenance of Passenger Cars, per car.....	a 783	a 667	3 619	665	3
4 Maintenance of Freight Cars, per car.....	a 90	a 150	4 68	66	4
5 Maintenance of Locomotives, per locomotive .....	a 3,502	a 4,274	5 2,205	2,960	5
6 Maintenance of Passenger Cars, per car, per mile run.....	a 1.009	a .749	6 .....	.874	6
7 Maintenance of Freight Cars, per car, per mile run .....	a .605	a 1.06	7 .....	.586	7
8 Maintenance of Locomotives, per locomotive, per mile run.....	a 7.66	a 9.08	8 5.42	7.18	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	3,519	4,218	9 1,842	2,051	9
10 Passenger miles, per mile.....	187,500	266,537	10 108,459	137,692	10
11 Passenger train mileage, per mile.....	3,571	3,908	11 .....	2,826	11
12 Passenger car mileage, per mile.....	23,636	27,203	12 .....	17,262	12
13 Passenger car mileage, per car .....	77,559	89,057	13 .....	76,044	13
14 Average number of cars, per passenger train .....	6.6	6.9	14 .....	6.1	14
15 Average number of passengers, per passenger train .....	53	68.2	15 .....	47.2	15
16 Average number of passengers, per car.....	8.03	9.6	16 .....	7.7	16
17 Average distance travelled, per passenger. ....miles	53	63	17 58.9	67.1	17
18 Gross earnings, per passenger .....	108	114	18 129.227	136.48	18
19 Gross earnings, per passenger, per mile travelled.....	2.035	1.809	19 2.194	2.034	19
20 Gross passenger earnings, per train mile.....	154.81	168.76	20 .....	118.76	20
21 Gross passenger earnings, per car mile.....	23.456	24.457	21 .....	19.47	21
22 Percentage of passenger expenses to earnings .....	65.9	66.8	22 .....	.....	22

a Includes cost of new equipments, amounting to about two-thirds of total.



## Statistics of Freight Traffic.

Name of Railroad.....	LAKE SHORE AND MICHIGAN SOUTHERN.		MICHIGAN CENTRAL (including Canada Southern).		
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
1 Number of revenue tons carried, per mile.....	14,067	15,260	1 6,341	6,784	1
2 Revenue ton miles, per mile.....	2,566,144	2,839,514	2 1,226,974	1,254,315	2
3 Freight train mileage, per mile.....	5,644	5,353	3 .....	4,315	3
4 Locomotive mileage, per mile.....	14,094	14,490	4 11,314	11,158	4
5 Freight car mileage, per mile.....	210,243	216,332	5 .....	94,211	5
6 Locomotive mileage, per locomotive .....	45,720	47,068	6 40,667	41,028	6
7 Freight car mileage, per car.....	a 14,878	a 21,564	7 .....	a 11,256	7
8 Freight car mileage, per car, per day.....	a 40.8	a 38.8	8 .....	a 30.8	8
9 Average number of all freight cars, per freight train.....	37.3	40.4	9 .....	21.8	9
10 Average number of empty freight cars, per freight train.....	10.8	10.4	10 .....	7.8	10
11 Percentage of loaded car mileage to total car mileage.....	71.1	74.2	11 .....	64.3	11
12 Average revenue tons, per freight train.....	454.7	530.5	12 .....	291	12
13 Average revenue tons, per loaded car.....	17.16	17.68	13 .....	20.8	13
14 Average revenue tons, per loaded and empty car.....	12.19	13.13	14 .....	13.3	14
15 Average distance of haul, per ton of freight. .... miles	182.4	186.1	15 193	185	15
16 Gross earnings, per ton.... cents	92.11	91	16 114.256	114.33	16
17 Gross earnings, per ton, per mile hauled .... cents	.505	.489	17 .592	.618	17
18 Gross freight earnings, per train mile..... cents	230.01	259.71	18 .....	179.74	18
19 Gross freight earnings, per car mile..... cents	6.17	6.43	19 .....	8.24	19
20 Percentage of freight expenses to earnings.....	65	70	20 .....	...	20
21 Principal articles of freight and percentage of tonnage from each.....	51.7... Minerals.....	50.6	21 { .....		21
	13.5... Manufactures....	15.5			
	10 ... Grain and Flour... 9.2				

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	NEW YORK, CHICAGO & ST. LOUIS.		LAKE ERIE AND WESTERN.	
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
1 Mileage owned.....	513	513	1 887	887 1
2 Mileage owned, leased and controlled by ownership of Stock.....	523	523	2 887	887 2
3 Average mileage operated.....	523	523	3 880	880 3
4 Mileage ballasted.....		511	4	4
5 Mileage of various kinds of ballast.....	Only gravel ballast used.		5	5
6 Mileage of second, third and fourth main tracks.....	15	15	6	6
7 Mileage of yard and side tracks.....	197	197	7 215	227 7
8 Number of ties renewed in track, per mile.....	318	369	8 455	394 8
9 Mileage of various weight rails.....	60 and 65 lbs. per yd.		9 56, 60 and 75 lbs. per yd.	9
10 Number of Locomotives owned, per mile.....	.306	.304	10 .139	.135 10
11 Average tractive power of Locomotives..... pounds			11	11
12 Number of Freight Cars owned, per mile.....	13.07	14.42	12 6.61	6.07 12
13 Average capacity of Freight Cars..... pounds			13	13
14 Number of Passenger Cars owned, per mile.....	.117	.14	14 .1	.1 14
15 Aggregate length of wooden trestles and bridges..... feet	20,407	18,627	15	15

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	NEW YORK, CHICAGO & ST. LOUIS.		LAKE ERIE AND WESTERN.	
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
<b>ASSETS AND LIABILITIES.</b>				
1 Stocks outstanding, per mile.....	57,361	57,361	1 26,909	26,909 1
2 Bonds outstanding, per mile.....	37,141	37,141	2 12,358	12,358 2
3 Total Stocks and Bonds, per mile.....	94,502	94,502	3 39,267	39,267 3
4 Various Stocks and Bonds in Treasury, per mile.....			4 c 154	c 125 4
5 Fixed Charges, including Taxes, per mile.....	2,309	2,392	5 996	993 5
6 Percentage of Fixed Charges and Taxes to Earnings.....	17.2	16.7	6 19.5	19 6
7 Charges ahead of Common Stock, per mile.....	3,839	3,922	7 1,803	1,802 7
8 Amount of Common Stock outstanding, per mile.....	26,769	26,769	8 13,455	13,455 8
9 Total Current Assets.....	2,295,238	2,880,210	9 1,324,066	1,276,817 9
10 Total Current Liabilities.....	2,057,705	2,595,556	10 900,660	892,485 10
11 Total Surplus.....	849,866	888,798	11 813,900	645,496 11
12 Total Surplus, per mile.....	1,625	1,699	12 925	734 12
13 Reserve Funds, for Betterments, per mile.....			13 ..... 227	227 13
<b>INCOME AND EXPENSES.</b>				
14 Gross Earnings, per mile.....	13,428	11,312	14 5,086	5,151 14
15 Percentage of Gross Earnings to Capital.....	14.2	15.1	15 13	13 15
16 Expenses, per mile.....	a 10,259	a 10,798	16 3,277	3,617 16
17 Percentage of Expenses to Gross Earnings.....	76.4	75.4	17 64.4	70 17
18 Net Earnings, per mile.....	3,169	3,514	18 1,809	1,534 18
19 Additional Miscellaneous Income, per mile.....	51	62	19 ..... 35	35 19
20 Expenses for Maintenance of Way and Structure, per mile.....	b 1,728	b 1,796	20 988	1,073 20
21 Expenses for Maintenance of Equipment, per mile.....	b 1,258	b 2,084	21 487	595 21
22 Percentage of Gross Earnings for Maintenance.....	22.2	27.1	22 29	32.4 22
23 Percentage of Expenses for Maintenance.....	29.1	35.9	23 40.5	46 23
24 Expenses for Conducting Transportation, per mile.....	b 7,041	b 6,692	24 1,583	1,794 24
25 General Expenses, per mile.....	232	227	25 219	156 25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	54.2	48.3	26 35.4	38 26
27 Surplus Earnings, per mile.....	911	1,183	27 825	574 27
28 Percentage of Gross Earnings for Surplus.....	6.8	8.3	28 10.3	11 28
29 Betterments charged to Reserve Funds, per mile.....			29 ..... 29	29 29

a Includes betterments amounting in 1900 to \$762 per mile, and in 1901 to \$1,446 per mile.

b Estimated.

c Par value.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	NEW YORK, CHICAGO & ST. LOUIS.		LAKE ERIE AND WESTERN.	
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
MAINTENANCE EXPENSES.				
1 Maintenance of Way and Structure, per ton mile..... cents	.075	.078	1 .173	.187
2 Maintenance of Equipment, per ton mile..... cents	.054	.081	2 .086	.103
3 Maintenance of Passenger Cars, per car.....	2,184	481	3 678	731
4 Maintenance of Freight Cars, per car.....	34	a76	4 33	37
5 Maintenance of Locomotives, per locomotive ..	1,586	b1,546	5 1,086	1,645
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.....	.874	6 1,179	1,323
7 Maintenance of Freight Cars, per car, per mile run.....cents	.194	a.237	7 .453	.468
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	.....	3.57	8 3.09	4.43
PASSENGER TRAFFIC.				
9 Number of passengers carried, per mile.....	1,105	1,266	9 2,064	2,130
10 Passenger miles, per mile.....	127,244	158,793	10 60,320	64,138
11 Passenger train mileage, per mile.....	2,303	2,295	11 1,583	1,664
12 Passenger car mileage, per mile.....	.....	15,402	12 5,752	5,979
13 Passenger car mileage, per car.....	.....	110,014	13 57,516	59,790
14 Average number of cars, per passenger train.....	6.28	6.71	14 3.63	3.59
15 Average number of passengers, per passenger train.....	55	69	15 54.45	39.49
16 Average number of passengers, per car.....	8.75	10.3	16 15	11
17 Average distance traveled, per passenger.....miles	115.2	125.4	17 29.23	30.12
18 Gross earnings, per passenger.....cents	195.6	196.9	18 58.19	50.12
19 Gross earnings, per passenger, per mile traveled.....cents	1.7	1.57	19 1.99	1.96
20 Gross passenger earnings, per train mile.....cents	101.5	117.3	20 75.83	75.66
21 Gross passenger earnings, per car mile.....cents	16.16	17.48	21 20.89	21.08
22 Percentage of passenger expenses to earnings.....	71	58	22 .....	.....

a Including cost of 800 new freight cars.

b There was also the sum of \$191,000 charged to operating expenses, for new locomotives not yet received.

## Statistics of Freight Traffic.

Name of Railroad.....	NEW YORK, CHICAGO & ST. LOUIS.		LAKE ERIE AND WESTERN.		
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
1 Number of revenue tons carried, per mile.....	7,781	8,839	1 3,646	3,856	1
2 Revenue ton miles, per mile.....	2,313,905	2,561,273	2 589,809	573,337	2
3 Freight train mileage, per mile.....	8,285	8,351	3 2,021	2,021	3
4 Locomotive mileage, per mile.....		13,252	4 4,550	4,653	4
5 Freight car mileage, per mile.....	226,692	231,395	5 48,159	47,411	5
6 Locomotive mileage, per locomotive.....		43,307	6 32,817	34,407	6
7 Freight car mileage, per car.....	217,343	216,053	7 27,285	27,806	7
8 Freight car mileage, per car, per day.....	248	244	8 219.9	221	8
9 Average number of all freight cars, per freight train.....	27.4	27.7	9 23.8	23.5	9
10 Average number of empty freight cars, per freight train.....	9.2	8.2	10 7.2	6.6	10
11 Percentage of loaded car mileage to total car mileage.....	66	70	11 69.64	72.05	11
12 Average revenue tons, per freight train.....	279	307	12 283.68	281.92	12
13 Average revenue tons, per loaded car.....	15.37	15.73	13 16.99	16.78	13
14 Average revenue tons, per loaded and empty car.....	10	11	14 11.9	12	14
15 Average distance of haul, per ton of freight.....miles	297	290	15 156.29	148.69	15
16 Gross earnings, per ton.....cents	142.2	131.3	16 96.719	94.35	16
17 Gross earnings, per ton, per mile hauled.....cents	478	453	17 619	635	17
18 Gross freight earnings, per train mile.....cents	133.5	138.9	18 174.459	180.002	18
19 Gross freight earnings, per car mile.....cents	4.909	5.014	19 7.322	7.673	19
20 Percentage of freight expenses to earnings.....	78	79.6	20 .....	.....	20
21 Principal articles of freight and percentage of tonnage from each.....	21.8....Grain and Flour... 19.4		21.8....Grain and Flour... 19.6		21
	13 .....Coal.....14		21 .....Manufactures.....21.3		
	8.1 ....Lumber..... 6.1		8.9....Bituminous coal.... 9.4		

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	NEW YORK CENTRAL AND HUDSON RIVER.		NEW YORK, NEW HAVEN AND HARTFORD.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Mileage owned.....	819	810	1 438	438	
2 Mileage owned, leased and controlled by ownership of Stock.....	3,357	3,320	2 2,038	2,038	
3 Average mileage operated.....	3,223	3,320	3 2,027	2,027	
4 Mileage ballasted.....		a 4,164	4	2,008	
5 Mileage of various kinds of ballast.....	.....Gravel.....2,871		5	.....Gravel.....1,833	
	.....Cinder..... 831			.....Broken Stone..... 175	
	.....Stone..... 526				
6 Mileage of second, third and fourth main tracks.....	1,830	1,862	6 842	845	
7 Mileage of yard and side tracks.....	1,945	1,977	7 1,160	1,189	
8 Number of ties renewed in track, per mile.....		467	8	597	
9 Mileage of various weight rails.....	.....50 to 100 lbs. per yd.....		9	.....60 to 100 lbs. per yd.....	
10 Number of Locomotives owned, per mile.....	.497	.516	10 .455	.465	
11 Average tractive power of Locomotives.....pounds		23,540	11	17,000	
12 Number of Freight Cars owned, per mile.....	19.22	18.63	12 6.51	6.53	
13 Average capacity of Freight Cars.....pounds	54,280	55,500	13	47,000	
14 Number of Passenger Cars owned, per mile.....	.639	.634	14 .9	.927	

a Including 236 miles reported as of "miscellaneous ballast".

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	NEW YORK CENTRAL AND HUDSON RIVER.		NEW YORK, NEW HAVEN AND HARTFORD.	
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.
<b>ASSETS AND LIABILITIES.</b>				
1 Stocks outstanding, per mile.....	35,681	39,733	1 26,978	26,978
2 Bonds outstanding, per mile.....	60,171	58,414	2 16,051	16,051
3 Total Stocks and Bonds, per mile.....	95,852	98,147	3 43,029	43,029
4 Various Stocks and Bonds in Treasury, per mile.....	38,047	38,270	4 11,711	11,816
5 Fixed Charges, including Taxes, per mile.....	6,371	6,295	5 3,941	4,036
6 Percentage of Fixed Charges and Taxes to Earnings.....	30.9	29.5	6 19.9	18.8
7 Charges ahead of Common Stock, per mile.....	6,371	6,295	7 3,941	4,036
8 Amount of Common Stock outstanding, per mile.....	35,681	39,733	8 26,978	26,978
9 Total Current Assets.....	11,353,472	25,362,643	9 8,444,179	8,445,065
10 Total Current Liabilities.....	13,508,729	16,009,930	10 7,213,159	6,501,746
11 Total Surplus.....	11,769,993	15,834,667	11 13,123,517	13,498,845
12 Total Surplus, per mile.....	3,653	4,769	12 6,474	6,660
13 Reserve Funds, for Betterments, per mile.....	565	525	13 .....	.....
<b>INCOME AND EXPENSES.</b>				
14 Gross Earnings, per mile.....	20,581	21,356	14 19,796	21,167
15 Percentage of Gross Earnings to Capital.....	21.5	21.8	15 46	49.9
16 Expenses, per mile.....	13,214	14,116	16 13,835	15,426
17 Percentage of Expenses to Gross Earnings.....	64.2	66.09	17 69.89	71.86
18 Net Earnings, per mile.....	7,367	7,240	18 5,961	6,041
19 Additional Miscellaneous Income, per mile.....	1,406	1,469	19 278	302
20 Expenses for Maintenance of Way and Structure, per mile.....	2,426	2,590	20 2,702	3,038
21 Expenses for Maintenance of Equipment, per mile.....	2,430	2,793	21 2,194	2,677
22 Percentage of Gross Earnings for Maintenance.....	23.6	25.2	22 21.7	26.6
23 Percentage of Expenses for Maintenance.....	36.7	38.1	23 35.4	37
24 Expenses for Conducting Transportation, per mile.....	7,874	8,195	24 8,168	9,283
25 General Expenses, per mile.....	484	538	25 474	426
26 Percentage of Gross for Conduct, Trans. and General Expenses.....	10.6	40.89	26 45.3	15.2
27 Surplus Earnings, per mile.....	1,981	1,888	27 2,298	2,308
28 Percentage of Gross Earnings for Surplus.....	9.6	8.9	28 11.7	10.8
29 Betterments charged to Reserve Funds, per mile.....	521	551	29 .....	.....

*a* After deducting \$465 per mile for betterments in 1901 and \$527 per mile in 1902.

*b* Including convertible bonds amounting to \$8,089 per mile.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	NEW YORK CENTRAL AND HUDSON RIVER.		NEW YORK, NEW HAVEN AND HARTFORD.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<i>Year ending.....</i>					
<b>MAINTENANCE EXPENSES.</b>					
1 Maintenance of Way and Structure, per ton mile.....cents	.118	.131	1 .123	.126	1
2 Maintenance of Equipment, per ton mile.....cents	.119	.145	2 .314	.376	2
3 Maintenance of Passenger Cars, per car.....	788	709	3 711	558	3
4 Maintenance of Freight Cars, per car.....	33	43	4 77	120	4
5 Maintenance of Locomotives, per locomotive.....	1,958	2,087	5 1,193	1,848	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	1.802	1.647	6 2.245	1.7	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.309	.116	7 .594	.88	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	5.198	5.584	8 5.114	6.366	8
<b>PASSENGER TRAFFIC.</b>					
9 Number of passengers carried, per mile.....	12,446	12,917	9 26,172	29,027	9
10 Passenger miles, per mile.....	355,726	431,748	10 468,219	505,279	10
11 Passenger train mileage, per mile.....	6,317	6,821	11 6,857	7,246	11
12 Passenger car mileage, per mile.....	34,273	37,149	12 28,629	30,235	12
13 Passenger car mileage, per car.....	43,741	43,068	13 31,798	32,836	13
14 Average number of cars, per passenger train.....	5.1	5.4	14 4.11	4.1	14
15 Average number of passengers, per passenger train.....	56	59	15 67	69	15
16 Average number of passengers, per car.....	10.4	10.9	16 16.3	16.8	16
17 Average distance travelled, per passenger.....miles	28	32	17 17.89	17.41	17
18 Gross earnings, per passenger.....cents	50.96	56	18 31.548	30.365	18
19 Gross earnings, per passenger, per mile travelled.....cents	1.82	1.75	19 1.763	1.744	19
20 Gross passenger earnings, per train mile.....cents	120	122	20 140.124	142.141	20
21 Gross passenger earnings, per car mile.....cents	22.22	22.59	21 34.166	34.67	21
22 Percentage of passenger expenses to earnings.....		60	22		22

a Approximate.



## Statistics of Freight Traffic.

Name of Railroad.....	NEW YORK CENTRAL AND HUDSON RIVER.		NEW YORK, NEW HAVEN AND HARTFORD.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile.....	11,303	10,723	1 7,616	8,458	1
2 Revenue ton miles, per mile.....	2,049,786	1,930,000	2 637,582	712,651	2
3 Freight train mileage, per mile.....	5,898	5,651	3 3,063	3,275	3
4 Locomotive mileage, per mile.....	17,903	18,491	4 1,493	13,490	4
5 Freight car mileage, per mile.....	203,730	191,733	5 84,435	89,164	5
6 Locomotive mileage, per locomotive.....	37,673	37,380	6 27,579	29,029	6
7 Freight car mileage, per car.....	10,597	10,293	7 b 12,973	b 13,658	7
8 Freight car mileage, per car, per day.....	29	28.2	8 b 35.5	b 37.4	8
9 Average number of all freight cars, per freight train.....	34.5	33.9	9 27.56	27.22	9
10 Average number of empty freight cars, per freight train.....	11	.....	10 7.34	6.79	10
11 Percentage of loaded car mileage to total car mileage.....	68	.....	11 73.4	75	11
12 Average revenue tons, per freight train.....	351	342	12 208.13	217.58	12
13 Average revenue tons, per loaded car.....	14.9	.....	13 10.29	10.65	13
14 Average revenue tons, per loaded and empty car.....	10.2	10.1	14 7.55	8	14
15 Average distance of haul, per ton of freight.....miles	181	180	15 83.72	84.25	15
16 Gross earnings, per ton.....cents	108.6	113.4	16 123.813	122.589	16
17 Gross earnings, per ton, per mile hauled.....cents	.6	.63	17 1.479	1.455	17
18 Gross freight earnings, per train mile.....cents	209	217	18 319.902	329.431	18
19 Gross freight earnings, per car mile.....cents	6.06	6.4	19 11.607	12.102	19
20 Percentage of freight expenses to earnings.....	.....	a 70	20 .....	.....	20
21 Principal articles of freight and percentage of tonnage from each.....	34.8.....	Coat.....31.3	21 {	.....Manufacturers.....22.2	21
	18 .....	Manufactures.....22.4		.....Anthracite Coal.....13.9	
	10.7 .....	Grain and Flour.....10.3		.....Bituminous Coal.....9.8	
				.....Lumber.....5.6	

a Approximate.

b Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	BUFFALO, ROCHESTER AND PITTSBURGH.		BOSTON AND MAINE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Mileage owned.....	284	281	1 618	619	1
2 Mileage owned, leased and controlled by ownership of Stock.....	472	472	2 2,265	2,266	2
3 Average mileage operated.....	472	472	3 2,257	2,266	3
4 Mileage ballasted.....			4		4
5 Mileage of various kinds of ballast.....			5		5
6 Mileage of second and additional main track.....	14	51	6 512	523	6
7 Mileage of yards and sidings.....	186	200	7 1,187	1,196	7
8 Number of ties renewed in track, per mile.....			8 500	681	8
9 Mileage of various weight rails.....	60 to 100 lbs. per yd.		9	65 to 100 lbs. per yd.	9
10 Number of Locomotives owned, per mile.....	.375	.392	10 .423	.422	10
11 Average tractive power of Locomotives.....pounds	36,255	37,580	11		11
12 Number of Freight Cars owned, per mile ..	21.29	22.78	12 7.75	7.63	12
13 Average capacity of Freight Cars.....pounds	59,940	61,880	13	50,000	13
14 Number of Passenger Cars owned, per mile.....	.167	.167	14 .687	.691	14

a Approximate.

## ANALYSIS OF RAILROAD REPORTS.

111

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	BUFFALO, ROCHESTER AND PITTSBURGH.		BOSTON AND MAINE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	25,124	25,424	11,250	11,324	1
2 Bonds outstanding, per mile.....	24,254	29,411	13,022	13,324	2
3 Total Stocks and Bonds, per mile.....	53,678	54,835	24,272	24,648	3
4 Various Stocks and Bonds in Treasury, per mile.....	2,126	2,126	b 4,798	b 4,094	4
5 Fixed Charges including Taxes, per mile.....	2,835	3,064	3,618	2,623	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	22.0	22.2	26.9	25.8	6
7 Charges ahead of Common Stock, per mile.....	3,598	3,827	3,702	3,706	7
8 Amount of Common Stock outstanding, per mile.....	12,712	12,712	9,852	9,932	8
9 Total Current Assets.....	996,183	913,318	7,714,792	8,052,414	9
10 Total Current Liabilities.....	880,107	928,594	8,956,744	8,712,361	10
11 Total Surplus.....	1,389,867	1,363,349	1,565,165	1,565,165	11
12 Total Surplus, per mile.....	2,945	2,888	693	691	12
13 Reserve Funds, for Betterments, per mile.....			84	58	13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	12,353	13,375	c 13,472	c 14,055	14
15 Percentage of Gross Earnings to Capital.....	23	24.4	55.7	57	15
16 Expenses, per mile.....	6,943	7,695	9,534	9,902	16
17 Percentage of Expenses to Gross Earnings.....	56.2	57.5	70.77	70.45	17
18 Net Earnings, per mile.....	5,410	5,680	3,938	4,153	18
19 Additional Miscellaneous Income, per mile.....			c 430	c 260	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,209	1,133	1,557	1,759	20
21 Expenses for Maintenance of Equipment, per mile.....	1,471	1,770	1,604	1,477	21
22 Percentage of Gross Earnings for Maintenance.....	21.7	21.7	23.5	23	22
23 Percentage of Expenses for Maintenance.....	38.6	37.7	31.1	32.7	23
24 Expenses for Conducting Transportation, per mile.....	3,977	4,495	6,017	6,339	24
25 General Expenses, per mile.....	285	297	356	325	25
26 Percentage of Gross for Conduct, Trans. and General Expenses.....	34.5	35.8	47.3	49.5	26
27 Surplus Earnings, per mile.....	a 1,452	a 1,464	749	789	27
28 Percentage of Gross Earnings for Surplus.....	11.8	10.9	5.6	5.6	28
29 Betterments charged to Reserve Funds, per mile.....			97	26	29

a After deducting \$1,123 per mile for betterments in 1901 and \$1,396 per mile in 1902.

b Book value.

c A slight change in bookkeeping methods included in 1902 some of the miscellaneous income in gross earnings; the original presentation of 1901 earnings is here preserved.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	BUFFALO, ROCHESTER AND PITTSBURGH.		BOSTON AND MAINE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.065	.053	1 .222	.246	1
2 Maintenance of Equipment, per ton mile.....cents	.079	.082	2 .181	.206	2
3 Maintenance of Passenger Cars, per car.....			3 406	431	3
4 Maintenance of Freight Cars, per car.....			4 40	43	4
5 Maintenance of Locomotives, per locomotive.....			5 1,150	1,173	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents			6 1.369	1.451	6
7 Maintenance of Freight Cars, per car, per mile run.....cents			7 .409	.461	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents			8 3.61	3.65	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	2,124	2,229	9 17,057	16,695	9
10 Passenger miles, per mile.....	72,797	87,951	10 280,229	289,188	10
11 Passenger train mileage, per mile.....	2,039	1,944	11 4,726	4,730	11
12 Passenger car mileage, per mile.....	7,093	7,100	12 20,369	20,514	12
13 Passenger car mileage, per car.....	42,378	42,418	13 29,649	29,697	13
14 Average number of cars, per passenger train.....	3.5	3.7	14 4.31	4.33	14
15 Average number of passengers, per passenger train.....	35	43	15 59.3	61.1	15
16 Average number of passengers, per car.....	10	11.6	16 13.8	14.1	16
17 Average distance travelled, per passenger.....miles	34.3	39.45	17 16.4	17.3	17
18 Gross earnings, per passenger.....cents	70.93	80.28	18 28.913	30.517	18
19 Gross earnings, per passenger, per mile travelled.....cents	2.07	2.035	19 1.763	1.764	19
20 Gross passenger earnings, per train mile.....cents	80.89	100.32	20 117.43	121.67	20
21 Gross passenger earnings, per car mile.....cents	23.11	27.11	21 27.25	28.1	21
22 Percentage of passenger expenses to earnings.....	96.9	83	22 .....	..	22

## Statistics of Freight Traffic.

Name of Railroad.....	BUFFALO, ROCHESTER AND PITTSBURGH.		BOSTON AND MAINE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
1 Number of revenue tons carried, per mile.....	14,345	14,691	7,761	8,024	1
2 Revenue ton miles, per mile.....	1,855,163	2,150,492	681,576	715,076	2
3 Freight train mileage, per mile.....	4,574	5,077	3,367	3,550	3
4 Locomotive mileage, per mile.....			11,563	12,246	4
5 Freight car mileage, per mile.....	129,167	140,263	70,354	71,209	5
6 Locomotive mileage, per locomotive ..			31,848	32,124	6
7 Freight car mileage, per car.....	a 6,066	a 6,158	a 9,775	a 9,336	7
8 Freight car mileage, per car, per day.....	a 16.6	a 16.9	a 26.8	a 25.6	8
9 Average number of all freight cars, per freight train.....	28.2	27.6	22.5	22.3	9
10 Average number of empty freight cars, per freight train.....	12.2	11.9			10
11 Percentage of loaded car mileage to total car mileage.....	56.65	56.9			11
12 Average revenue tons, per freight train.....	345	353	202	201.4	12
13 Average revenue tons, per loaded car.....	21.6	22.5			13
14 Average revenue tons, per loaded and empty car .....	12.2	12.8	8.98	9	14
15 Average distance of haul, per ton of freight .....miles	129.3	146.4	87.8	89.1	15
16 Gross earnings, per ton, .....cents	70.65	73.9	98.565	99.7	16
17 Gross earnings, per ton, per mile hauled. ....cents	.546	.505	1.134	1.119	17
18 Gross freight earnings, per train mile. .... cents	231.89	233.80	239.62	231.59	18
19 Gross freight earnings, per car mile. ....cents	8.22	8.1	10.66	10.39	19
20 Percentage of freight expenses to earnings.....	51.3	54.7			20
21 Principal articles of freight and percentage of tonnage from each	67.8.... Bituminous Coal ....67.1 Other tonnage diversified.		22.7..... Coal.....21.4 12 .....Lumber.....12.3 Other tonnage diversified.		21

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	DELAWARE AND HUDSON.		DELAWARE, LACKAWANNA AND WESTERN.		
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
<b>Tear ending.....</b>					
1 Mileage owned.....	665	661	1 194	194	1
2 Mileage owned, leased and controlled by ownership of Stock .....	665	661	2 947	948	2
3 Average mileage operated .....	665	661	3 771	771	3
4 Mileage ballasted.....			4		4
5 Mileage of various kinds of ballast.....			5		5
6 Mileage of second, third and fourth main tracks .....		266	6 517	504	6
7 Mileage of yard and side tracks .....		387	7 735	759	7
8 Number of ties renewed in track, per mile .....			8 641	756	8
9 Mileage of various weight rails .....	44 to 80 lbs. per yd.		9 60 to 80 lbs. per yd.		9
10 Number of Locomotives owned, per mile .....	.499	.502	10 .81	.849	10
11 Average tractive power of Locomotives ..... pounds			11		11
12 Number of Freight Cars owned, per mile .....	19.59	20.11	12 35.75	34.69	12
13 Average capacity of Freight Cars ..... pounds	56,280	58,540	13		13
14 Number of Passenger Cars owned, per mile .....	.602	.614	14 .95	.972	14
15 Aggregate mileage of curved track .....		211	15		15
16 Number of curves in track .....		1,387	16		16
17 Mileage of ascending track.....		528	17		17
18 Average ascent per mile of ascending track.....feet		35.7	18		18

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	DELAWARE AND HUDSON.		DELAWARE, LACKAWANNA AND WESTERN.			
Year ending .....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.		DECEMBER 31, 1901.	
ASSETS AND LIABILITIES.						
1 Stocks outstanding, per mile.....	52,320	52,414	1	33,982	33,982	1
2 Bonds outstanding, per mile.....	11,278	13,143	2	3,978	3,978	2
3 Total Stocks and Bonds, per mile.....	63,598	65,557	3	37,960	37,960	3
4 Various Stocks and Bonds in Treasury, per mile.....	a 2,147	a 2,147	4	7,836	9,586	4
5 Fixed Charges, including Taxes, per mile.....	1,761	4,891	5	8,101	8,329	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	27.6	26.5	6	29.9	27.3	6
7 Charges ahead of Common Stock, per mile.....	4,764	4,891	7	8,101	8,329	7
8 Amount of Common Stock outstanding, per mile.....	52,320	52,411	8	33,982	33,982	8
9 Total Current Assets.....	6,499,999	6,869,282	9	6,644,961	6,337,184	9
10 Total Current Liabilities.....	4,477,089	4,718,655	10	5,486,511	5,572,811	10
11 Total Surplus.....	5,189,409	6,318,164	11	15,523,572	16,719,627	11
12 Total Surplus, per mile.....	8,254	9,558	12	20,134	21,685	12
13 Reserve Funds, for Betterments, per mile.....			13			13
INCOME AND EXPENSES.						
14 Gross Earnings, per mile.....	17,272	18,429	14	27,091	30,489	14
15 Percentage of Gross Earnings to Capital.....	27	28	15	71.4	80.3	15
16 Expenses, per mile.....	8,728	9,297	16	17,838	17,668	16
17 Percentage of Expenses to Gross Earnings.....	50.5	50.4	17	65.8	57.9	17
18 Net Earnings, per mile.....	8,543	9,132	18	9,253	12,821	18
19 Additional Miscellaneous Income, per mile.....	1,019	2,725	19	2,389	2,697	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,519	1,803	20	3,996	4,285	20
21 Expenses for Maintenance of Equipment, per mile.....	1,467	1,655	21	3,600	3,183	21
22 Percentage of Gross Earnings for Maintenance.....	17.2	18.7	22	28	24.5	22
23 Percentage of Expenses for Maintenance.....	34.9	37.2	23	42.6	42.3	23
24 Expenses for Conducting Transportation, per mile.....	5,540	5,629	24	9,817	9,694	24
25 General Expenses, per mile.....	200	20.6	25	423	490	25
26 Percentage of Gross for Conduct, Trans. and General Expenses.....	33.2	31.6	26	37.8	33.4	26
27 Surplus Earnings, per mile.....	4,791	65,099	27	3,511	63,930	27
28 Percentage of Gross Earnings for Surplus.....	27.7	27.6	28	13	12.8	28
29 Betterments charged to Reserve Funds, per mile.....			29			29

a Par value.

b After deducting for sinking fund and depreciation, \$1,896 per mile.

c After deducting \$3,273 per mile for betterments.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	DELAWARE AND HUDSON.		DELAWARE, LACKAWANNA AND WESTERN.		
Year ending.....	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.087	.093	1 .110	.151	1
2 Maintenance of Equipment, per ton mile.....cents	.084	.085	2 .111	.112	2
3 Maintenance of Passenger Cars, per car.....	180	223	3 632	380	3
4 Maintenance of Freight Cars, per car.....	a 31	a 32	4 31	35	4
5 Maintenance of Locomotives, per locomotive.....	1,076	1,153	5 1,709	1,250	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	.69	.88	6 .....	.....	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	a .45	a .47	7 .....	.....	7
8 Maintenance of Locomotives, per locomotive, per mile run... cents	.....	.....	8 .....	.....	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	7,447	8,629	9 18,714	19,489	9
10 Passenger miles, per mile.....	130,931	145,022	10 366,337	415,870	10
11 Passenger train mileage, per mile.....	3,526	3,581	11 7,029	7,364	11
12 Passenger car mileage, per mile.....	15,610	16,978	12 .....	.....	12
13 Passenger car mileage, per car.....	27,642	25,952	13 .....	.....	13
14 Average number of cars, per passenger train.....	4.43	4.74	14 .....	.....	14
15 Average number of passengers, per passenger train.....	37.13	40.49	15 52	56.4	15
16 Average number of passengers, per car.....	8.4	8.5	16 .....	.....	16
17 Average distance travelled, per passenger.....miles	17.58	16.80	17 19.58	21.34	17
18 Gross earnings, per passenger..... cents	40.49	37.88	18 29	30	18
19 Gross earnings, per passenger, per mile travelled..... cents	2.31	2.26	19 1.48	1.41	19
20 Gross passenger earnings, per train mile.....cents	96.54	102.77	20 96	99	20
21 Gross passenger earnings, per car mile.....cents	21.81	21.67	21 .....	.....	21
22 Percentage of passenger expenses to earnings.....	.....	.....	22 .....	.....	22

a Maintenance of ordinary freight cars was about \$44 per car. Figures given include coal cars.



## Statistics of Freight Traffic.

Name of Railroad.....	DELAWARE AND HUDSON.		DELAWARE, LACKAWANNA AND WESTERN.		
	DECEMBER 31, 1900.	DECEMBER 31, 1901.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
Year ending.....					
1 Number of revenue tons carried, per mile.....	18,352	19,755	1 16,176	a 18,104	1
2 Revenue ton miles, per mile.....	1,733,687	1,928,653	2 a 2,445,033	a 2,831,462	2
3 Freight train mileage, per mile.....	5,155	5,419	3 7,950	8,108	3
4 Locomotive mileage, per mile.....			4		4
5 Freight car mileage, per mile.....	133,218	139,529	5		5
6 Locomotive mileage, per locomotive.....			6		6
7 Freight car mileage, per car.....	a 6,899	a 6,937	7		7
8 Freight car mileage, per car, per day.....	a 19	a 19	8		8
9 Average number of all freight cars, per freight train.....	24.4	25.71	9		9
10 Average number of empty freight cars, per freight train.....	7.96	8.63	10		10
11 Percentage of loaded car mileage to total car mileage.....	66.4	67.5	11		11
12 Average revenue tons, per freight train.....	317.58	355.36	12 325.7	372.38	12
13 Average revenue tons, per loaded car.....	19.32	20.8	13		13
14 Average revenue tons, per loaded and empty car.....	13.	13.82	14		14
15 Average distance of haul, per ton of freight..... miles	94.46	97.6	15 151	156	15
16 Gross earnings, per ton..... cents	74.57	73.65	16 b 125.8	b 128.5	16
17 Gross earnings, per ton, per mile hauled..... cents	.789	.755	17 b .833	b .821	17
18 Gross freight earnings, per train mile..... cents	250.69	268.16	18 248	279	18
19 Gross freight earnings, per car mile..... cents	10.28	10.42	19		19
20 Percentage of freight expenses to earnings.....			20		20
21 Principal articles of freight and percentage of tonnage from each.....	54.2 Anthracite Coal... 57.9 Other tonnage diversified.		48.8 Anthracite Coal... 53.7 12.6 Agricultural Products. 11.1 Other tonnage diversified.		21

a Report not clear on this point.

b Approximate.

## Statistics of Physical Condition.

Name of Railroad.....	ONTARIO AND WESTERN.		ERIE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Mileage owned.....	319	319	1 1,660	1,615	1
2 Mileage owned, leased and controlled by ownership of Stock.....	480	480	2 2,318	2,318	2
3 Average mileage operated.....	480	480	3 2,156	2,154	3
4 Mileage ballasted.....			4 2,882	2,993	4
5 Mileage of various kinds of ballast.....			5	Gravel..... 1,310 Cinder..... 1,192 Slag..... 258 Stone..... 233	5
6 Mileage of second, third and fourth main tracks.....			6 724	727	6
7 Mileage of yard and side tracks.....	193	202	7 1,254	1,254	7
8 Number of ties renewed in track, per mile.....	440	429	8 538	447	8
9 Mileage of various weight rails.....	90.....50 to 62 lbs. per yd.... 90 62.....67 lbs. per yd..... 62 239.....56 lbs. per yd..... 239 37.....95 lbs. per yd..... 37		9	68 to 90 lbs. per yd.	9
10 Number of Locomotives owned, per mile.....	.292	.3	10 .514	.536	10
11 Average tractive power of Locomotives..... pounds	26,344	27,014	11 24,634	26,395	11
12 Number of Freight Cars owned, per mile.....	13.7	13.63	12 23.51	24.63	12
13 Average capacity of Freight Cars..... pounds	58,260	58,520	13 51,839	52,929	13
14 Number of Passenger Cars owned, per mile.....	.3	.3	14 .444	.441	14
15 Aggregate length of wooden bridges..... feet	1,277	1,354	15		15
16 Aggregate length of wooden trestles..... feet	16,524	16,236	16		16

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	ONTARIO AND WESTERN.		ERIE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	121,081	121,079	1 81,758	81,834	1
2 Bonds outstanding, per mile.....	a 35,285	a 35,285	2 84,879	84,677	2
3 Total Stocks and Bonds, per mile.....	156,366	156,364	3 166,667	166,511	3
4 Various Stocks and Bonds in Treasury, per mile.....	27,284	26,737	4 5,571	5,576	4
5 Fixed Charges, including Taxes, per mile.....	2,545	2,400	5 4,837	5,249	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	22.9	21.1	6 26.8	27.6	6
7 Charges ahead of Common Stock, per mile.....	2,545	2,400	7 6,022	6,435	7
8 Amount of Common Stock outstanding, per mile.....	121,071	121,671	8 52,124	52,172	8
9 Total Current Assets.....	1,899,295	2,203,222	9 7,765,996	7,497,548	9
10 Total Current Liabilities.....	b 1,277,367	b 1,160,632	10 6,947,365	7,077,619	10
11 Total Surplus.....	5,069,400	5,763,237	11 6,278,030	8,419,615	11
12 Total Surplus, per mile.....	10,553	12,007	12 3,912	3,939	12
13 Reserve Funds, for Betterments, per mile.....			13		13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	11,089	11,357	14 18,139	18,988	14
15 Percentage of Gross Earnings to Capital.....	7.1	7	15 10.9	11.4	15
16 Expenses, per mile.....	7,570	8,359	16 12,679	12,604	16
17 Percentage of Expenses to Gross Earnings.....	68.35	73.6	17 69.9	66.39	17
18 Net Earnings, per mile.....	3,510	2,998	18 5,460	6,384	18
19 Additional Miscellaneous Income, per mile.....	869	1,067	19 694	903	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,583	1,863	20 1,989	1,848	20
21 Expenses for Maintenance of Equipment, per mile.....	1,431	1,556	21 2,809	2,602	21
22 Percentage of Gross Earnings for Maintenance.....	27.18	30.18	22 26.4	23.4	22
23 Percentage of Expenses for Maintenance.....	40	40.9	23 37.9	35.3	23
24 Expenses for Conducting Transportation, per mile.....	4,263	4,643	24 7,486	7,689	24
25 General Expenses, per mile.....	303	305	25 395	464	25
26 Percentage of Gross for Conduct. Trans. and General Expenses....	41.17	43.52	26 43.1	42.9	26
27 Surplus Earnings, per mile.....	1,830	1,372	27 1,309	2,036	27
28 Percentage of Gross Earnings for Surplus.....	16	12.1	28 7.2	10.7	28
29 Betterments charged to Reserve Funds, per mile.....			29		29

a In addition, Ontario and Western has borrowed \$5,825,000 (\$12,125 per mile), secured by bonds owned as investments. The amount in 1902 was \$5,525,000 (\$11,510 per mile).

b Including liability to Manhattan Trust Company for rolling stock under lease, \$482,000 in 1901 and \$456,000 in 1902.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	ONTARIO AND WESTERN.		ERIE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
<b>MAINTENANCE EXPENSES.</b>					
1 Maintenance of Way and Structure, per ton mile.....cents	.147	.165	1 .086	.084	1
2 Maintenance of Equipment, per ton mile.....cents	.133	.138	2 .121	.118	2
3 Maintenance of Passenger Cars, per car.....	491	561	3 626	436	3
4 Maintenance of Freight Cars, per car.....	60	59	4 48	32	4
5 Maintenance of Locomotives, per locomotive.....	1,640	1,774	5 2,154	2,318	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	1.81	2.022	6 1.47	.962	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.85	.895	7 .556	.417	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	5.41	6.35	8 7.61	8.77	8
<b>PASSENGER TRAFFIC.</b>					
9 Number of passengers carried, per mile.....	2,734	2,888	9 7,982	8,634	9
10 Passenger miles, per mile.....	97,255	103,573	10 217,843	243,584	10
11 Passenger train mileage, per mile.....	1,845	1,876	11 3,822	3,953	11
12 Passenger car mileage, per mile.....	8,144	8,380	12 18,931	20,000	12
13 Passenger car mileage, per car.....	27,047	27,742	13 42,604	45,295	13
14 Average number of cars, per passenger train.....	4.4	4.5	14 4 95	5.06	14
15 Average number of passengers, per passenger train.....	52.7	55	15 56.99	61.62	15
16 Average number of passengers, per car.....	11.9	12.2	16 11.56	12.2	16
17 Average distance travelled, per passenger.....miles	35.57	35.87	17 27.29	28.2	17
18 Gross earnings, per passenger.....cents	65.16	64.37	18 42.3	43.4	18
19 Gross earnings, per passenger, per mile travelled.....cents	1.83	1.795	19 1.55	1.539	19
20 Gross passenger earnings, per train mile.....cents	91.16	93.66	20 104.48	111.68	20
21 Gross passenger earnings, per car mile.....cents	25.08	20.81	21 21.1	22.1	21
22 Percentage of passenger expenses to earnings.....	74	76.4	22 .....	.....	22

## ANALYSIS OF RAILROAD REPORTS.

121

## Statistics of Freight Traffic.

Name of Railroad.....	ONTARIO & WESTERN.		ERIE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile.....	7,310	7,526	12,059	12,858	1
2 Revenue ton miles, per mile.....	1,075,382	1,128,728	2,314,277	2,208,143	2
3 Freight train mileage, per mile.....	64,575	64,824	66,169	65,865	3
4 Locomotive mileage, per mile.....	8,469	9,048	14,015	14,168	4
5 Freight car mileage, per mile.....	87,860	89,865	202,865	189,028	5
6 Locomotive mileage, per locomotive.....	31,430	30,159	28,307	26,433	6
7 Freight car mileage, per car.....	a 7,086	a 6,594	a 8,627	a 7,675	7
8 Freight car mileage, per car, per day.....	a 19.1	a 18	a 23	a 21	8
9 Average number of all freight cars, per freight train.....	23.7	22.7	32.89	32.23	9
10 Average number of empty freight cars, per freight train.....	8.29	8.94	10.68	10.15	10
11 Percentage of loaded car mileage to total car mileage.....	65	60.6	67.54	68.51	11
12 Average revenue tons, per freight train.....	290	285	375.16	376.52	12
13 Average revenue tons, per loaded car.....	22	20.7	16.89	17.05	13
14 Average revenue tons, per loaded and empty car.....	12.24	12.56	11.1	11.7	14
15 Average distance of haul, per ton of freight.....miles	147.11	149.98	191.9	171.73	15
16 Gross earnings, per ton.....cents	121.68	120.64	112.64	109.05	16
17 Gross earnings, per ton, per mile hauled.....cents	.827	.804	.587	.635	17
18 Gross freight earnings, per train mile.....cents	212.49	204.87	220.19	238,995	18
19 Gross freight earnings, per car mile.....cents	8.9	9.02	6.696	7.41	19
20 Percentage of freight expenses to earnings.....	68	71.2	.....	.....	20
21 Principal articles of freight and percentage of tonnage from each.....	.....		21 {	24 .....Anthracite Coal.....21.7 16.8 .....Bituminous Coal.....18.1 17.1 .....Other Minerals.....16.9	21

a Report not clear on this point.

b Helping engine mileage is probably included here, but not in the statistics dependent upon freight train mileage.

c Exclusive of helping engine mileage which amounted to 812 in 1901 and 858 in 1902.

## Statistics of Physical Condition.

Name of Railroad	a READING.		CENTRAL OF NEW JERSEY.	
Year ending	JUNE 30, 1901.	JUNE 30, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
1 Mileage owned.	366	366	1 151	1 151
2 Mileage owned, leased and controlled by ownership of Stock	1,155	2,145	2 677	2 677
3 Average mileage operated	1,000	1,003	3 612	3 639
4 Mileage ballasted			4	4
5 Mileage of various kinds of ballast			5	5
6 Mileage of second, third and fourth main tracks	432	438	6 327	6 327
7 Mileage of yard and side tracks	923	956	7 469	7 485
8 Number of ties renewed in track, per mile			8 497	8
9 Mileage of various weight rails	56 to 90 lbs. per yd.		9 56 to 80 lbs. per yd.	9
10 Number of Locomotives owned, per mile	.878	.889	10 .64	10 .66
11 Average tractive power of Locomotives pounds	17,180	20,769	11 17,212	11 18,510
12 Number of Freight Cars owned, per mile	34.2	37.77	12 25.86	12 26.92
13 Average capacity of Freight Cars pounds	54,740	58,950	13 50,969	13 56,860
14 Number of Passenger Cars owned, per mile	.803	.811	14 .724	14 .709

a It is difficult to analyze the Reading report on the same basis as the others. The mileage, earnings, etc., of the Philadelphia and Reading Ry. are used. Net income of other properties is treated as "Miscellaneous Income".

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	READING.		CENTRAL OF NEW JERSEY.		
	JUNE 30, 1901.	JUNE 30, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
<i>Year ending</i> .....					
<b>ASSETS AND LIABILITIES.</b>					
1 Stocks outstanding, per mile.....	140,000	139,570	1 44,398	42,898	1
2 Bonds outstanding, per mile.....	92,914	98,680	2 72,561	74,697	2
3 Total Stocks and Bonds, per mile.....	232,914	238,250	3 114,953	117,595	3
4 Various Stocks and Bonds in Treasury, per mile.....	a 151,104	a 150,433	4 41,270	40,913	4
5 Fixed Charges, including Taxes, per mile.....	b 10,092	b 11,205	5 8,155	8,609	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	36.5	38.5	6 37.5	36	6
7 Charges ahead of Common Stock, per mile.....	12,892	14,005	7 8,155	8,609	7
8 Amount of Common Stock outstanding, per mile.....	70,000	69,785	8 42,385	42,898	8
9 Total Current Assets.....	976,283	733,864	9 6,685,874	6,663,783	9
10 Total Current Liabilities.....	579,896	802,916	10 4,958,238	5,297,111	10
11 Total Surplus.....	1,467,901	1,239,912	11 7,716,926	9,369,893	11
12 Total Surplus, per mile.....	1,468	1,236	12 12,020	14,663	12
13 Reserve Funds, for Betterments, per mile.....	.....	.....	13 ..... 548	.....	13
<b>INCOME AND EXPENSES.</b>					
14 Gross Earnings, per mile.....	27,617	29,083	14 21,756	23,925	14
15 Percentage of Gross Earnings to Capital.....	11.9	12.2	15 18.9	20.3	15
16 Expenses, per mile.....	15,743	16,467	16 12,264	12,217	16
17 Percentage of Expenses to Gross Earnings.....	57	56.6	17 56.4	51.1	17
18 Net Earnings, per mile.....	11,874	12,616	18 9,492	11,678	18
19 Additional Miscellaneous Income, per mile.....	3,104	2,520	19 2,738	2,578	19
20 Expenses for Maintenance of Way and Structure, per mile.....	2,602	2,970	20 2,058	2,130	20
21 Expenses for Maintenance of Equipment, per mile.....	3,476	3,532	21 2,705	2,589	21
22 Percentage of Gross Earnings for Maintenance.....	22	22.4	22 21.9	19.7	22
23 Percentage of Expenses for Maintenance.....	38.6	39.5	23 38.8	38.5	23
24 Expenses for Conducting Transportation, per mile.....	8,647	9,107	24 6,526	6,575	24
25 General Expenses, per mile.....	1,019	857	25 980	951	25
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	35	34.3	26 34.5	31.5	26
27 Surplus Earnings, per mile.....	c 2,297	c 1,929	27 4,080	5,045	27
28 Percentage of Gross Earnings for Surplus.....	8.3	6.6	28 18.8	21.1	28
29 Betterments charged to Reserve Funds, per mile.....	.....	.....	29 ..... 548	.....	29

a Par value.

b Sinking Fund charges and insurance payments are here included in fixed charges, although not so included in the annual report.

c After deducting \$2,589 per mile for betterments in 1901 and \$2,601 per mile in 1902.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	READING.		CENTRAL OF NEW JERSEY.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.095	.105	1 .104	.098	1
2 Maintenance of Equipment, per ton mile.....cents	.127	.125	2 .137	.119	2
3 Maintenance of Passenger Cars, per car.....	400	345	3 335	462	3
4 Maintenance of Freight Cars, per car.....	48	38	4 48	37	4
5 Maintenance of Locomotives, per locomotive.....	1,459	1,652	5 1,295	1,324	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	1.318	1.127	6 1.177	1.646	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.697	.615	7 .514	.623	7
8 Maintenance of Locomotives, per locomotive, per mile run... cents	4.98	5.81	8 5.41	5.81	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	22,697	24,912	9 21,668	22,220	9
10 Passenger miles, per mile.....	281,387	305,393	10 271,941	274,661	10
11 Passenger train mileage, per mile.....	6,121	6,149	11 5,464	5,135	11
12 Passenger car mileage, per mile.....	24,362	24,511	12 20,652	19,876	12
13 Passenger car mileage, per car.....	30,339	30,609	13 28,513	28,037	13
14 Average number of cars, per passenger train.....	4	4.03	14 3.78	3.85	14
15 Average number of passengers, per passenger train.....	46.4	49.73	15 49.77	53.48	15
16 Average number of passengers, per car.....	11.6	12	16 13.17	13.89	16
17 Average distance travelled, per passenger.....miles	12.525	12.258	17 12.55	12.36	17
18 Gross earnings, per passenger..... cents	20.06	19.53	18 18.469	18.331	18
19 Gross earnings, per passenger, per mile travelled..... cents	1.605	1.593	19 1.472	1.483	19
20 Gross passenger earnings, per train mile.....cents	84.08	89.65	20 81.334	88.276	20
21 Gross passenger earnings, per car mile.....cents	21.02	22.25	21 21.521	22.806	21
22 Percentage of passenger expenses to earnings.....	.....	.....	22 .....	.....	22



## Statistics of Freight Traffic.

Name of Railroad.....	READING.		CENTRAL OF NEW JERSEY.		
	JUNE 30, 1901.	JUNE 30, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
1 Number of revenue tons carried, per mile .....	30,077	31,871	1 25,322	27,538	1
2 Revenue ton miles, per mile.....	2,729,971	2,835,302	2 1,972,139	2,183,594	2
3 Freight train mileage, per mile.....	10,863	10,050	3 64,790	64,637	3
4 Locomotive mileage, per mile.....	25,697	25,157	4 15,326	15,059	4
5 Freight car mileage, per mile.....	235,522	222,394	5 152,359	160,219	5
6 Locomotive mileage, per locomotive .....	29,268	28,288	6 23,940	22,800	6
7 Freight car mileage, per car.....	a 6,886	a 5,889	7 a 5,891	a 5,952	7
8 Freight car mileage, per car, per day.....	a 19	a 16.1	8 a 16.1	a 16.3	8
9 Average number of all freight cars, per freight train.....	21.7	22.1	9 31.8	34.5	9
10 Average number of empty freight cars, per freight train.....	.....	.....	10 12.5	13.6	10
11 Percentage of loaded car mileage to total car mileage.....	.....	.....	11 60.6	60.5	11
12 Average revenue tons, per freight train.....	251.3	282.1	12 411.7	470.9	12
13 Average revenue tons, per loaded car.....	.....	.....	13 21.4	22.5	13
14 Average revenue tons, per loaded and empty car.....	11.6	12.8	14 12.9	13.6	14
15 Average distance of haul, per ton of freight. .... miles	91	89	15 77.9	79.3	15
16 Gross earnings, per ton..... cents	74.71	73.97	16 67.834	69.918	16
17 Gross earnings, per ton, per mile hauled..... cents	.82	.83	17 .871	.882	17
18 Gross freight earnings, per train mile.....cents	206.77	234.53	18 358.6	415.2	18
19 Gross freight earnings, per car mile.....cents	9.53	10.61	19 11.274	12.018	19
20 Percentage of freight expenses to earnings.....	.....	.....	20 .....	.....	20
21 Principal articles of freight and percentage of tonnage from each	35 .... Anthracite Coal ... 29.6 16.7 .... Bituminous Coal 19	.....	21 { .....	.....	21

a Report not clear on this point.

b Exclusive of helping engine mileage amounting to 265 in 1900 and 344 in 1901. Also exclusive of light mileage, which is usually included in freight train mileage and should be so included according to the Interstate Commerce Commission's methods, amounting to 656 in 1900 and 694 in 1901.

## Statistics of Physical Condition.

Name of Railroad.....	LONG ISLAND.		LEHIGH VALLEY.			
Year ending .....	JUNE 30, 1901.	JUNE 30, 1902.	NOVEMBER 30, 1900.		NOVEMBER 30, 1901.	a JUNE 30, 1902.
1 Mileage owned. ....	281	290	1	980	980	980
2 Mileage owned, leased and controlled by ownership of Stock.....	392	396	2	1,398	1,399	1,400
3 Average mileage operated.....	380	396	3	1,382	1,382	1,387
4 Mileage ballasted .....	392	396	4	.....	.....	.....
5 Mileage of various kinds of ballast .....	255.....	.....Cinders .....	5	.....	.....	.....
	137.....	.....Gravel.....				
6 Mileage of second, third and fourth main tracks.....	110	110	6	591	592	592
7 Mileage of yard and side tracks.....	144	144	7	918	938	942
8 Number of ties renewed in track, per mile.....	454	.....	8	.....	.....	.....
9 Mileage of various weight rails.....	.....56 to 100 lbs. per yd.....		9	.....58 to 100 lbs. per yd .....		
10 Number of Locomotives owned, per mile. ....	.418	.447	10	.535	.55	.562
11 Average tractive power of Locomotives.....pounds	14,579	16,547	11	22,261	23,292	23,211
12 Number of Freight Cars owned, per mile.....	3.074	2.91	12	25.292	25.127	24.92
13 Average capacity of Freight Cars.....pounds	47,415	47,128	13	57,702	57,799	58,353
14 Number of Passenger Cars owned, per mile.....	1.41	1.7	14	.34	.399	.341

a Lehigh Valley's fiscal year now ends on June 30; the first annual report under the new arrangement is here analyzed.

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	LONG ISLAND.		LEHIGH VALLEY.			
	JUNE 30, 1901.	JUNE 30, 1902.	NOVEMBER 30, 1900.	NOVEMBER 30, 1901.	JUNE 30, 1902.	
<b>ASSETS AND LIABILITIES.</b>						
1 Stocks outstanding, per mile.....	31,508	30,303	1 29,263	29,263	29,157	
2 Bonds outstanding, per mile.....	a 69,578	a 68,958	2 35,851	38,909	38,818	
3 Total Stocks and Bonds, per mile.....	a 101,086	a 99,261	3 65,117	68,172	67,975	
4 Various Stocks and Bonds in Treasury, per mile.....	7,896	8,133	4 d 11,704	d 12,645	d 12,303	
5 Fixed Charges, including Taxes, per mile.....	3,778	3,941	5 5,022	5,170	5,070	
6 Percentage of Fixed Charges and Taxes to Earnings.....	29.6	26.5	6 31.3	26.8	29	
7 Charges ahead of Common Stock, per mile.....	3,778	3,941	7 5,022	5,170	5,070	
8 Amount of Common Stock outstanding, per mile.....	31,508	30,303	8 29,263	29,263	29,157	
9 Total Current Assets.....	1,099,636	1,413,949	9 5,004,524	6,223,278	4,943,552	
10 Total Current Liabilities.....	1,585,759	2,141,651	10 7,534,225	6,118,386	5,937,348	
11 Total Surplus.....	b 907,450	b 918,515	11 b 1,910,585	b 1,257,224	b 3,772,117	
12 Total Surplus, per mile.....	b 2,388	b 2,319	12 b 1,383	b 910	b 2,431	
13 Reserve Funds, for Betterments, per mile.....	532	1,489	13 .....	.....	.....	
<b>INCOME AND EXPENSES.</b>						
14 Gross Earnings, per mile.....	12,796	14,838	14 16,678	19,310	17,497	
15 Percentage of Gross Earnings to Capital.....	14.5	15	15 28	26	25.8	
16 Expenses, per mile.....	9,255	10,383	16 13,923	14,532	14,166	
17 Percentage of Expenses to Gross Earnings.....	72.3	69.88	17 83.5	75.21	80.97	
18 Net Earnings, per mile.....	3,541	4,475	18 2,755	4,787	3,330	
19 Additional Miscellaneous Income, per mile.....	753	840	19 764	800	778	
20 Expenses for Maintenance of Way and Structure, per mile.....	1,634	1,795	20 2,794	3,256	3,310	
21 Expenses for Maintenance of Equipment, per mile.....	1,330	1,352	21 3,439	3,478	3,713	
22 Percentage of Gross Earnings for Maintenance.....	22	21.2	22 37.3	34.8	40.31	
23 Percentage of Expenses for Maintenance.....	31	30.3	23 46.4	44.7	49.8	
24 Expenses for Conducting Transportation, per mile.....	6,049	6,881	24 7,171	7,269	6,583	
25 General Expenses, per mile.....	341	356	25 530	519	532	
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	50	48.7	26 46.2	40.3	40.66	
27 Surplus Earnings, per mile.....	c 515	c 1,374	27 b 1,503	416	b 961	
28 Percentage of Gross Earnings for Surplus.....	4	9.2	28 b 9	2	b 5.5	
29 Betterments charged to Reserve Funds, per mile.....	356	396	29 .....	.....	.....	

a Includes outstanding securities of leasehold estates, amounting to \$13,021 per mile in 1901 and \$12,495 per mile in 1902.

b Deficit.

c Transferred to reserve fund for betterments.

d Book value.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	LONG ISLAND.		LEHIGH VALLEY.			
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	NOVEMBER 30, 1900.		NOVEMBER 30, 1901.	JUNE 30, 1902.
MAINTENANCE EXPENSES.						
1 Maintenance of Way and Structure, per ton mile .....	1.469	1.397	1	.118	.118	.135
2 Maintenance of Equipment, per ton mile .....	1.105	1.053	2	.145	.126	.151
3 Maintenance of Passenger Cars, per car.....	236	239	3	631	790	769
4 Maintenance of Freight Cars, per car.....	71	74	4	67	61	63
5 Maintenance of Locomotives, per locomotive .....	1.190	1,316	5	2,509	2,834	3,589
6 Maintenance of Passenger Cars, per car, per mile run.....	1.002	.....	6	1.515	1.767	2.004
7 Maintenance of Freight Cars, per car, per mile run .....	1.31	.....	7	.879	.741	.72
8 Maintenance of Locomotives, per locomotive, per mile run.....	4.224	.....	8	7.4	8.53	11.4
PASSENGER TRAFFIC.						
9 Number of passengers carried, per mile.....	38,184	41,949	9	3,414	3,207	3,106
10 Passenger miles, per mile.....	522,770	607,818	10	115,595	150,402	150,343
11 Passenger train mileage, per mile.....	8,103	9,064	11	3,134	3,232	3,092
12 Passenger car mileage, per mile.....	27,331	.....	12	14,155	15,596	15,089
13 Passenger car mileage, per car .....	23,550	.....	13	38,573	39,716	38,365
14 Average number of cars, per passenger train.....	3.37	.....	14	4.51	4.82	4.88
15 Average number of passengers, per passenger train .....	64.52	67.06	15	39.9	49.8	52
16 Average number of passengers, per car.....	19.1	.....	16	8.8	10.03	10.7
17 Average distance travelled, per passenger.....miles	13.69	14.49	17	33.86	46.9	48.4
18 Gross earnings, per passenger .....	18.2	20.5	18	62.73	82.03	85.06
19 Gross earnings, per passenger, per mile travelled.....	1.329	1.413	19	1.852	1.749	1.757
20 Gross passenger earnings, per train mile.....	110.5	116.9	20	77.545	91.055	97.22
21 Gross passenger earnings, per car mile.....	32.8	.....	21	17.172	18.873	19.92
22 Percentage of passenger expenses to earnings.....	.....	.....	22	.....	.....	.....

## Statistics of Freight Traffic.

Name of Railroad.....	LONG ISLAND.		LEHIGH VALLEY.			
	JUNE 30, 1901.	JUNE 30, 1902.	NOVEMBER 30, 1900.		NOVEMBER 30, 1901	JUNE 30, 1902.
1 Number of revenue tons carried, per mile.....	4,320	4,911	1	12,612	14,331	13,101
2 Revenue ton miles, per mile.....	111,208	128,140	2	2,372,096	2,753,882	2,461,523
3 Freight train mileage, per mile.....	986	1,067	3	c 5,549	c 5,889	c 5,280
4 Locomotive mileage, per mile.....	11,777	.....	4	13,625	13,654	12,621
5 Freight car mileage, per mile.....	17,196	17,900	5	193,290	207,762	188,339
6 Locomotive mileage, per locomotive.....	28,175	.....	6	33,900	33,341	31,180
7 Freight car mileage, per car.....	a 5,594	a 6,151	7	b 8,629	b 9,511	b 8,753
8 Freight car mileage, per car, per day.....	a 15.3	a 16.9	8	b 23.64	b 26.06	b 23.98
9 Average number of all freight cars, per freight train.....	17.44	16.87	9	34.94	35.4	35.67
10 Average number of empty freight cars, per freight train.....	5.73	5.48	10	11.97	11.75	11.63
11 Percentage of loaded car mileage to total car mileage.....	66.1	67.5	11	65.7	66.8	67.4
12 Average revenue tons, per freight train.....	112.78	120.38	12	428	467.62	466.83
13 Average revenue tons, per loaded car.....	9.63	10.57	13	18.61	19.77	19.42
14 Average revenue tons, per loaded and empty car.....	6.46	7.14	14	12	13.2	13.1
15 Average distance of haul, per ton of freight..... miles	25.74	26.14	15	188	192.16	188.11
16 Gross earnings, per ton..... cents	84.1	82.5	16	101.87	104.22	104.3
17 Gross earnings, per ton, per mile hauled..... cents	3.267	3.158	17	.542	.542	.554
18 Gross freight earnings, per train mile..... cents	368.4	380	18	231.563	253.612	258.83
19 Gross freight earnings, per car mile..... cents	21.12	22.53	19	6.643	7.189	7.259
20 Percentage of freight expenses to earnings.....	31.8	35.4	20	.....	.....	.....
21 Principal articles of freight and percentage of tonnage from each.....	34.7.....Coal.....	29.1	21	44.5.....Anthracite Coal.....	48.2	42.1
	18.2.....Manufactures.....	29.2		13.6.....Grain and Flour.....	12.1	10.6
	.....Other tonnage diversified.....	.....		10.8.....Manufactures.....	11.4	13.2
	.....	.....		6.4.....Bituminous Coal.....	5.5	7

a Report not clear on this point.

b Average of all cars used on system, including foreign cars.

c Exclusive of helping engine mileage, which amounted to 961 in 1900, 603 in 1901 and 495 in 1902.

## Statistics of Physical Condition.

Name of Railroad.....	NORFOLK AND WESTERN.		CHESAPEAKE AND OHIO.			
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.		
1 Mileage owned.....	1,563	1,685	1 878	925	1	
2 Mileage owned, leased and controlled by ownership of Stock.....	1,567	1,685	2 1,562	1,637	2	
3 Average mileage operated.....	a 1,560	1,677	3 1,507	1,618	3	
4 Mileage ballasted .....	1,289	1,393	4 1,331	1,419	4	
5 Mileage of various kinds of ballast.....	525 .....	b Full ballast..... 573	926 .....	Stone and slag..... 997	5	
	764.....	Partial ballast..... 820	208 .....	Cinder..... 237		
			128 .....	Gravel..... 131		
6 Mileage of second, third and fourth main tracks.....	83	105	6 129	119	6	
7 Mileage of yard and side tracks.....	498	534	7 551	569	7	
8 Number of ties renewed in track, per mile.....	562	462	8 521	514	8	
9 Mileage of various weight rails.....	424 .....	56 lbs. per yd..... 479	9 {	209.....	62 lbs. per yd..... 200	9
	420 .....	67 lbs. per yd..... 361		115.....	70 lbs. per yd..... 122	
	150 .....	75 lbs. per yd..... 169		836.....	75 lbs. per yd..... 869	
	385 .....	85 lbs. per yd..... 471		201.....	160 lbs. per yd..... 282	
10 Number of Locomotives owned, per mile.....	.302	.299	10 .267	.265	10	
11 Average tractive power of Locomotives.....pounds	24,285	24,667	11 24,089	22,305	11	
12 Number of Freight Cars owned, per mile.....	12.62	12.71	12 12.42	12.1	12	
13 Average capacity of Freight Cars.....pounds	59,497	60,800	13 61,800	61,000	13	
14 Number of Passenger Cars owned, per mile .....	.153	.148	14 .153	.149	14	

a In the 1902 report the 1901 figures are, for comparison, altered to include mileage of 1902. The statistics here given are not thus changed, but present actual results.

b Slag, cinder and gravel ballast.

## ANALYSIS OF RAILROAD REPORTS.

131

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad .....	NORFOLK AND WESTERN.		CHESAPEAKE AND OHIO.		
Year ending .....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	55,909	52,011	40,174	37,417	1
2 Bonds outstanding, per mile.....	32,238	a 31,695	52,740	e 44,283	2
3 Total Stocks and Bonds, per mile .....	88,147	83,706	92,914	81,700	3
4 Various Stocks and Bonds in Treasury, per mile.....	1,546	891	c 11,382	c 12,773	4
5 Fixed Charges, including Taxes, per mile.....	1,704	1,682	2,624	2,597	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	16.8	16.1	25.7	25.4	6
7 Charges ahead of Common Stock, per mile.....	2,288	2,225	2,624	2,597	7
8 Amount of Common Stock outstanding, per mile.....	41,326	38,443	40,165	37,410	8
9 Total Current Assets.....	2,645,362	2,394,082	1,907,760	2,013,873	9
10 Total Current Liabilities.....	2,329,935	2,363,766	2,897,051	3,349,166	10
11 Total Surplus.....	2,633,471	2,815,546	1,082,325	1,062,325	11
12 Total Surplus, per mile.....	1,688	1,679	705	657	12
13 Reserve Funds, for Betterments, per mile .....	2,387	2,301	74	254	13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	10,119	10,166	10,200	10,213	14
15 Percentage of Gross Earnings to Capital.....	11.5	12.5	11	12.5	15
16 Expenses, per mile.....	5,794	5,774	6,348	6,427	16
17 Percentage of Expenses to Gross Earnings.....	57.25	55.2	62.2	62.9	17
18 Net Earnings, per mile.....	4,325	4,692	3,852	3,786	18
19 Additional Miscellaneous Income, per mile.....	44	45	99	84	19
20 Expenses for Maintenance of Way and Structure, per mile.....	1,266	1,271	1,472	1,345	20
21 Expenses for Maintenance of Equipment, per mile.....	1,490	1,392	1,495	1,703	21
22 Percentage of Gross Earnings for Maintenance.....	27.2	25.4	29	29.9	22
23 Percentage of Expenses for Maintenance.....	47.6	46.1	46.7	47.1	23
24 Expenses for Conducting Transportation, per mile.....	2,832	2,894	3,215	3,200	24
25 General Expenses, per mile.....	206	218	166	179	25
26 Percentage of Gross for Conduct, Trans. and General Expenses...	30	29.7	33	33	26
27 Surplus Earnings, per mile.....	b 1,523	b 1,420	d 403	d 383	27
28 Percentage of Gross Earnings for Surplus.....	15.1	13.6	3.9	3.8	28
29 Betterments charged to Reserve Funds, per mile.....	86	1,232			29

a Norfolk and Western and the Pocahontas Coal and Coke Company are jointly and severally liable for \$20,000,000 four per cent. bonds, but the debt is to be paid by the latter company, and appears on its balance sheet.

b After deducting for betterments, \$1,142 per mile in 1901 and \$1,635 per mile in 1902.

c Cost to company.

d After deducting \$925 per mile for betterments in 1901 and \$830 per mile in 1902.

e Chesapeake and Ohio is also liable for additional guaranteed bonds amounting to \$4,222 per mile.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	NORFOLK AND WESTERN.		CHESAPEAKE AND OHIO.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.069	.068	1 .073	.068	1
2 Maintenance of Equipment, per ton mile..... cents	.081	.074	2 .074	.086	2
3 Maintenance of Passenger Cars, per car.....	456	411	3 743	744	3
4 Maintenance of Freight Cars, per car.....	38	38	4 52	70	4
5 Maintenance of Locomotives, per locomotive.....	1,645	1,462	5 1,411	1,636	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	1.137	.825	6 1.187	1.213	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.367	.315	7 .464	.673	7
8 Maintenance of Locomotives, per locomotive, per mile run.....cents	6.688	5.09	8 3.89	3.76	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile.....	1,443	1,569	9 1,716	1,664	9
10 Passenger miles, per mile.....	55,103	60,391	10 94,580	90,242	10
11 Passenger train mileage, per mile.....	1,391	1,456	11 1,854	1,904	11
12 Passenger car mileage, per mile.....	7,228	7,365	12 9,555	9,213	12
13 Passenger car mileage, per car.....	40,101	49,805	13 62,607	61,346	13
14 Average number of cars, per passenger train.....	5.2	5.1	14 5.15	4.81	14
15 Average number of passengers, per passenger train.....	39.6	44.7	15 51	47	15
16 Average number of passengers, per car.....	7.6	8.1	16 9.9	9.9	16
17 Average distance traveled, per passenger..... miles	38.2	38.5	17 54	51.23	17
18 Gross earnings, per passenger.....cents	90.9	90.19	18 107	110	18
19 Gross earnings, per passenger, per mile traveled.....cents	2.381	2.35	19 1.984	2.023	19
20 Gross passenger earnings, per train mile.....cents	112.93	115.4	20 120	115	20
21 Gross passenger earnings, per car mile.....cents	21.739	22.63	21 23.446	23.76	21
22 Percentage of passenger expenses to earnings.....	58.6	56.05	22 .....	.....	22



## Statistics of Freight Traffic.

Name of Railroad.....	NORFOLK AND WESTERN.		CHESAPEAKE AND OHIO.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile.....	6,946	7,316	1 6,720	6,738	1
2 Revenue ton miles, per mile.....	1,836,135	1,879,494	2 2,025,206	1,973,762	2
3 Freight train mileage, per mile.....	3,985	3,951	3 3,962	3,875	3
4 Locomotive mileage, per mile.....	7,427	8,432	4 8,597	8,430	4
5 Freight car mileage, per mile.....	137,295	131,539	5 137,552	125,445	5
6 Locomotive mileage, per locomotive.....	24,597	28,167	6 41,520	43,236	6
7 Freight car mileage, per car.....	12,483	12,063	7 a11,198	a10,398	7
8 Freight car mileage, per car, per day.....	34.2	33.5	8 a30.7	a28.5	8
9 Average number of all freight cars, per freight train.....	34.46	33.29	9 34.7	32.4	9
10 Average number of empty freight cars, per freight train.....	13.03	12.11	10 11.9	10.9	10
11 Percentage of loaded car mileage to total car mileage.....	62.2	63.6	11 65.5	66.4	11
12 Average revenue tons, per freight train.....	461	476	12 511	509	12
13 Average revenue tons, per loaded car.....	21.5	22.5	13 22.5	23.7	13
14 Average revenue tons, per loaded and empty car.....	13.4	14.3	14 14.7	15.7	14
15 Average distance of haul, per ton of freight..... miles	264.31	256.92	15 301	293	15
16 Gross earnings, per ton..... cents	121.94	118.96	16 117	117.7	16
17 Gross earnings, per ton, per mile hauled..... cents	.461	.463	17 .388	.402	17
18 Gross freight earnings, per train mile..... cents	212.58	220.28	18 198.4	204.6	18
19 Gross freight earnings, per car mile..... cents	6.17	6.62	19 5.713	6.31	19
20 Percentage of freight expenses to earnings.....	60	58.8	20 .....	.....	20
21 Principal articles of freight and percentage of tonnage from each.....	58. Bituminous Coal and Coke. 57.3 Other tonnage diversified.		53.6 Bituminous Coal and Coke 51.5 10.6 ..... Lumber..... 9.6 7.2 ..... Grain and Flour..... 5.7		21

a Report not clear on this point.

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.....	SOUTHERN.		LOUISVILLE AND NASHVILLE.	
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.
1 Mileage owned.....	4,360	4,365	1 3,365	3,450
2 Mileage owned, leased and controlled by ownership of Stock.....	6,729	6,766	2 3,324	5,542
3 Average mileage operated.....	a 6,425	6,744	3 3,169	3,327
4 Mileage ballasted.....	2,681	3,136	4 2,349	c.....
5 Mileage of various kinds of ballast.....	1,165.....Gravel.....1,116 902.....Stone and Slag... 884 482.....Stone..... 799		5 636....b Full ballast..... 1,739....b Partial ballast.....	
6 Mileage of second and additional main track.....	26	27	6 50	61
7 Mileage of yards and sidings.....	1,392	1,459	7 763	778
8 Number of ties renewed in track, per mile.....	327	386	8 380	
9 Mileage of various weight rails.....	2,614....56 lbs. per yd....2,508 1,788....60-62 lbs. per yd....1,742 555....75 lbs. per yd.... 597 743....80 lbs. per yd.... 900		9 1,170....58½ lbs. per yd..... 1,277....70 lbs. per yd..... 201 .. 80 lbs. per yd .....	
10 Number of Locomotives owned, per mile.....	.124	.139	10 .173	.173
11 Average tractive power of Locomotives.....pounds	21,878	25,478	11 21,894	
12 Number of Freight Cars owned, per mile.....	4.26	5.14	12 7.467	7.478
13 Average capacity of Freight Cars.....pounds	53,010	54,667	13 54,588	
14 Number of Passenger Cars owned, per mile.....	.111	.119	14 .114	.139

a Excluding the St. Louis division, which was operated for but six months of the year.

b Rock, gravel and slag ballast.

c The majority of the facts left blank only for 1902 were supplied for 1901 by letters from an official of the Company.

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	SOUTHERN.		LOUISVILLE AND NASHVILLE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
ASSETS AND LIABILITIES.					
1 Stocks outstanding, per mile.....	28,021	26,692	1 17,353	18,009	1
2 Bonds outstanding, per mile.....	25,428	24,733	2 28,489	26,933	2
3 Total Stocks and Bonds, per mile.....	53,449	51,425	3 45,844	44,942	3
4 Various Stocks and Bonds in Treasury, per mile.....	2,891	2,903	4 3,657	2,522	4
5 Fixed Charges including Taxes, per mile.....	1,289	1,379	5 1,960	1,829	5
6 Percentage of Fixed Charges and Taxes to Earnings.....	21	24.6	6 22.1	19.8	6
7 Charges ahead of Common Stock, per mile.....	1,588	1,839	7 1,960	1,829	7
8 Amount of Common Stock outstanding, per mile.....	18,680	17,795	8 17,355	18,009	8
9 Total Current Assets.....	7,052,074	6,894,163	9 6,975,828	6,519,258	9
10 Total Current Liabilities.....	7,959,552	7,784,076	10 6,204,233	6,845,149	10
11 Total Surplus.....	4,637,253	6,510,895	11 5,844,047	7,723,682	11
12 Total Surplus, per mile.....	731	965	12 1,844	2,021	12
13 Reserve Funds, for Betterments, per mile.....	162	94	13 95	101	13
INCOME AND EXPENSES.					
14 Gross Earnings, per mile.....	5,230	5,592	14 8,842	9,232	14
15 Percentage of Gross Earnings to Capital.....	9.7	10.2	15 19.2	20.6	15
16 Expenses, per mile.....	3,497	3,801	16 5,753	6,283	16
17 Percentage of Expenses to Gross Earnings.....	66.8	67.7	17 65.1	68.1	17
18 Net Earnings, per mile.....	1,733	1,791	18 3,089	2,949	18
19 Additional Miscellaneous Income, per mile.....	a 106	122	19 221	301	19
20 Expenses for Maintenance of Way and Structure, per mile.....	846	855	20 1,374	1,353	20
21 Expenses for Maintenance of Equipment, per mile.....	764	838	21 1,261	1,335	21
22 Percentage of Gross Earnings for Maintenance.....	30.8	30.2	22 30	29.2	22
23 Percentage of Expenses for Maintenance.....	46	44.5	23 46	42.9	23
24 Expenses for Conducting Transportation, per mile.....	1,714	1,919	24 2,859	3,266	24
25 General Expenses, per mile.....	172	189	25 259	319	25
26 Percentage of Gross for Conduct, Trans. and General Expenses....	36	37.6	26 35.2	38.8	26
27 Surplus Earnings, per mile.....	551	534	27 1,351	1,420	27
28 Percentage of Gross Earnings for Surplus.....	10.5	9.5	28 15.2	15.4	28
29 Betterments charged to Reserve Funds, per mile.....			29 302	483	29

a Net earnings of the St. Louis division for the six months operated are here included in "Miscellaneous Income"; the gross earnings, expenses and net earnings are not included with the Southern Railway earnings until 1902.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	SOUTHERN.		LOUISVILLE AND NASHVILLE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile.....cents	.232	.215	1 .164	.148	1
2 Maintenance of Equipment, per ton mile.....cents	.209	.211	2 .15	.145	2
3 Maintenance of Passenger Cars, per car .....	871	931	3 a 761	a 799	3
4 Maintenance of Freight Cars, per car.....	65	116	4 75	73	4
5 Maintenance of Locomotives, per locomotive.....	2,029	1,935	5 2,590	2,740	5
6 Maintenance of Passenger Cars, per car, per mile run.....cents	1.28	1.26	6 a 1.401	a 1.429	6
7 Maintenance of Freight Cars, per car, per mile run..... cents	1.11	1.31	7 .712	.7	7
8 Maintenance of Locomotives, per locomotive, per mile run....cents	5.57	5.63	8 6.043	6.226	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile .....	1,157	1,277	9 2,168	2,163	9
10 Passenger miles, per mile.....	57,662	63,443	10 75,648	79,179	10
11 Passenger train mileage, per mile.....	1,579	1,740	11 2,031	2,002	11
12 Passenger car mileage, per mile.....	8,216	8,796	12 9,861	9,761	12
13 Passenger car mileage, per car.....	66,985	73,872	13 a 68,534	a 70,294	13
14 Average number of cars, per passenger train.....	5.08	5.06	14 4.85	4.87	14
15 Average number of passengers, per passenger train.....	35.64	36.45	15 37.24	39.54	15
16 Average number of passengers, per car.....	7.1	7.2	16 7.7	8.1	16
17 Average distance travelled, per passenger.....miles	49.81	49.69	17 34.88	36.6	17
18 Gross earnings, per passenger.....cents	115.85	111.50	18 81.92	84.72	18
19 Gross earnings, per passenger, per mile travelled.....cents	2.33	2.241	19 2.35	2.32	19
20 Gross passenger earnings, per train mile..... cents	105.5	104.208	20 110.97	114.756	20
21 Gross passenger earnings, per car mile.....cents	20.77	20.59	21 22,858	23,539	21
22 Percentage of passenger expenses to earnings.....			22 66.67	67.26	22

a The apparent discrepancy in these items is due to a lack of clearness in the annual report.

## Statistics of Freight Traffic.

Name of Railroad.....	SOUTHERN.		LOUISVILLE AND NASHVILLE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Number of revenue tons carried, per mile.....	2,198	2,493	1 5,371	5,507	1
2 Revenue ton miles, per mile.....	364,890	397,139	2 838,114	923,506	2
3 Freight train mileage, per mile.....	1,865	2,033	3 3,772	4,000	3
4 Locomotive mileage, per mile.....	4,706	5,035	4 7,415	7,614	4
5 Freight car mileage, per mile.....	41,033	41,588	5 78,668	80,353	5
6 Locomotive mileage, per locomotive.....	36,422	36,786	6 42,860	44,009	6
7 Freight car mileage, per car.....	7,968	8,847	7 10,570	10,428	7
8 Freight car mileage, per car, per day.....	22	24.24	8 28.96	28.57	8
9 Average number of all freight cars, per freight train.....	21.66	20.56	9 20.87	20.09	9
10 Average number of empty freight cars, per freight train.....	5.86	6.15	10 6.7	6.11	10
11 Percentage of loaded car mileage to total car mileage.....	68.72	70.1	11 67.89	69.59	11
12 Average revenue tons, per freight train.....	191.67	195.31	12 222.18	230.88	12
13 Average revenue tons, per loaded car.....	12.95	13.55	13 15.60	16.52	13
14 Average revenue tons, per loaded and empty car.....	8.84	9.5	14 10.65	11.49	14
15 Average distance of haul, per ton of freight.....miles	166	159.3	15 159	168	15
16 Gross earnings, per ton.....cents	157.25	148.31	16 122.377	124.295	16
17 Gross earnings, per ton, per mile hauled.....cents	.95	.931	17 .769	.741	17
18 Gross freight earnings, per train mile.....cents	181.57	181.888	18 170.81	171.117	18
19 Gross freight earnings, per car mile.....cents	8.43	8.85	19 8.19	8.518	19
20 Percentage of freight expenses to earnings.....			20 66	69.21	20
21 Principal articles of freight and percentage of tonnage from each	27.9.....Bituminous Coal....	31.2	21 { 24.8.....Coal.....	14.9.....Ore.....	21 {
	25.5.....Manufactures.....	23.9			
	16.2.....Lumber.....	14.9			
	13.8.....Agricultural Products..	13		6.9.....Lumber.....	

## ANALYSIS OF RAILROAD REPORTS.

## Statistics of Physical Condition.

Name of Railroad.....	CENTRAL OF GEORGIA.		SEABOARD AIR LINE.		
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
Year ending.....					
1 Mileage owned.....	1,448	1,448	1 2,532	2,540	1
2 Mileage owned, leased and controlled by ownership of Stock.....	1,845	1,845	2 2,611	2,619	2
3 Average mileage operated.....	1,678	1,815	3 2,592	2,604	3
4 Mileage ballasted.....			4 506	611	4
5 Mileage of various kinds of ballast.....			5 { 227..... Full ballast..... 320 (Rock and gravel). 279..... Partial Ballast..... 291 }		5
6 Mileage of second, third and fourth main tracks.....	3	3	6 .....		6
7 Mileage of yard and side tracks.....	351	358	7 325	341	7
8 Number of ties renewed in track, per mile.....	274	451	8 .....	373	8
9 Mileage of various weight rails.....	680.....56 lbs. per yd. .... 680 718. 61-68 " " ..... 718 106.....70 75 " " ..... 106 239.....80 " " ..... 254 }		9 { 552...56 lbs. and less per yd. .... 554 1,321...60 " per yd. .... 1,250 392...68-70 lbs. per yd. .... 392 164...80-85 " " ..... 164 }		9
10 Number of Locomotives owned, per mile.....	.126	.116	10 .....	.113	10
11 Average tractive power of Locomotives.....pounds			11 .....	20,357	11
12 Number of Freight Cars owned, per mile.....	3.37	3.28	12 3.22	3.26	12
13 Average capacity of Freight Cars.....pounds			13 .....	54,018	13
14 Number of Passenger Cars owned, per mile.....	.132	.115	14 .1	.098	14

a On June 30, 1902, there were also 81 miles of track laid with 75-pound rails.

## Statistics of—Assets and Liabilities—Income and Expenses.

Name of Railroad.....	CENTRAL OF GEORGIA.		SEABOARD AIR LINE.	
	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.
<b>ASSETS AND LIABILITIES.</b>				
1 Stocks outstanding, per mile.....	2,980	2,710	1 18,673	18,587
2 Bonds outstanding, per mile.....	a 28,932	a 26,731	2 21,241	21,169
3 Total Stocks and Bonds, per mile.....	31,912	29,441	3 39,914	39,756
4 Various Stocks and Bonds in Treasury, per mile.....	73	362	4 1,008	1,136
5 Fixed Charges, including Taxes, per mile.....	1,269	1,246	5 1,077	1,165
6 Percentage of Fixed Charges and Taxes to Earnings.....	30.8	29.7	6 26.8	27.4
7 Charges ahead of Common Stock, per mile.....	1,716	1,653	7 1,376	1,463
8 Amount of Common Stock outstanding, per mile.....	2,980	2,710	8 11,188	11,137
9 Total Current Assets.....	1,587,504	1,311,816	9 4,946,651	4,959,061
10 Total Current Liabilities.....	1,228,385	1,139,504	10 5,937,372	5,678,931
11 Total Surplus.....	200,172	122,892	11 352,676	897,056
12 Total Surplus, per mile.....	131	67	12 97	344
13 Reserve Funds, for Betterments, per mile.....	249	239	13 .....	76
<b>INCOME AND EXPENSES.</b>				
14 Gross Earnings, per mile.....	4,124	4,202	14 4,022	4,251
15 Percentage of Gross Earnings to Capital.....	12.9	14.3	15 10.1	10.7
16 Expenses, per mile.....	2,848	2,998	16 2,855	2,815
17 Percentage of Expenses to Gross Earnings.....	69	71.1	17 70.98	66.32
18 Net Earnings, per mile.....	1,276	1,204	18 1,167	1,436
19 Additional Miscellaneous Income, per mile.....	112	109	19 8	23
20 Expenses for Maintenance of Way and Structure, per mile.....	740	781	20 539	492
21 Expenses for Maintenance of Equipment, per mile.....	496	554	21 476	419
22 Percentage of Gross Earnings for Maintenance.....	30	31.8	22 25.2	21.13
23 Percentage of Expenses for Maintenance.....	43.1	44.5	23 35.5	32.4
24 Expenses for Conducting Transportation, per mile.....	1,356	1,506	24 1,684	1,734
25 General Expenses, per mile.....	155	156	25 156	170
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	39	39.6	26 45.7	44.79
27 Surplus Earnings, per mile.....	120	67	27 97	204
28 Percentage of Gross Earnings for Surplus.....	2.9	1.6	28 2.4	6.9
29 Betterments charged to Reserve Funds, per mile.....	.....	.....	29 .....	.....

a Including Income bonds amounting to \$8,881 per mile in 1901 and \$3,130 per mile in 1902.

## Statistics of Maintenance—Passenger Traffic.

Name of Railroad.....	CENTRAL OF GEORGIA.		SEABOARD AIR LINE.		
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.	
MAINTENANCE EXPENSES.					
1 Maintenance of Way and Structure, per ton mile .....	.284	.305	1 .228	.173	1
2 Maintenance of Equipment, per ton mile.....cents	.19	.217	2 .201	.147	2
3 Maintenance of Passenger Cars, per car.....	423	502	3 .....	.....	3
4 Maintenance of Freight Cars, per car.....	74	38	4 .....	.....	4
5 Maintenance of Locomotives, per locomotive .....	970	1,218	5 1,654	1,579	5
6 Maintenance of Passenger Cars, per car, per mile run..... cents	.972	.997	6 .....	.....	6
7 Maintenance of Freight Cars, per car, per mile run.....cents	.783	.422	7 .....	.....	7
8 Maintenance of Locomotives, per locomotive, per mile run ..cents	3.321	3.828	8 3.95	4.11	8
PASSENGER TRAFFIC.					
9 Number of passengers carried, per mile .....	1,280	1,342	9 629	704	9
10 Passenger miles, per mile .....	12,006	13,727	10 30,461	33,628	10
11 Passenger train mileage, per mile.....	1,336	1,433	11 1,316	1,299	11
12 Passenger car mileage, per mile .....	5,731	5,785	12 6,179	6,609	12
13 Passenger car mileage, per car.....	43,506	50,335	13 61,839	67,226	13
14 Average number of cars, per passenger train.....	3.81	3.72	14 4.95	4.53	14
15 Average number of passengers, per passenger train .....	27.95	28.1	15 21	25	15
16 Average number of passengers, per car.....	7.34	7.55	16 4.24	5.52	16
17 Average distance travelled, per passenger.....miles	32.83	32.57	17 48.44	47.76	17
18 Gross earnings, per passenger .....	76.49	72.50	18 120.133	112.563	18
19 Gross earnings, per passenger, per mile travelled .....	2.33	2.226	19 2.48	2.357	19
20 Gross passenger earnings, per train mile .....	86.16	80.14	20 70.06	73.55	20
21 Gross passenger earnings, per car mile .....	22.62	21.54	21 11.15	16.24	21
22 Percentage of passenger expenses to earnings .....	.....	.....	22 .....	.....	22



## Statistics of Freight Traffic.

Name of Railroad.....	CENTRAL OF GEORGIA.		SEABOARD AIR LINE.					
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	JUNE 30, 1901.	JUNE 30, 1902.				
1 Number of revenue tons carried, per mile.....	1,615	1,766	1,542	1,734	1			
2 Revenue ton miles, per mile.....	260,495	255,394	236,465	284,285	2			
3 Freight train mileage, per mile.....	1,526	1,513	1,570	1,674	3			
4 Locomotive mileage, per mile.....	3,691	3,760	3,053	3,589	4			
5 Freight car mileage, per mile.....	31,912	29,517	26,942	29,539	5			
6 Locomotive mileage, per locomotive.....	29,217	32,416	41,892	38,417	6			
7 Freight car mileage, per car.....	a 9,455	a 9,001	a 8,378	a 9,061	7			
8 Freight car mileage, per car, per day.....	a 25.9	a 24.7	a 23	a 27.8	8			
9 Average number of all freight cars, per freight train.....	18.81	20	17.18	17.65	9			
10 Average number of empty freight cars, per freight train.....	6.49	5.77	5.24	5.45	10			
11 Percentage of loaded car mileage to total car mileage.....	67.5	69	69.5	69.1	11			
12 Average revenue tons, per freight train.....	163.24	162.86	150.62	175.27	12			
13 Average revenue tons, per loaded car.....	12.08	12.49	12.62	13.92	13			
14 Average revenue tons, per loaded and empty car.....	8.17	8.14	8.77	9.92	14			
15 Average distance of haul, per ton of freight.....miles	161.34	144.7	153.32	163.85	15			
16 Gross earnings, per ton.....cents	171.7	163.3	182.148	175.044	16			
17 Gross earnings, per ton, per mile hauled.....cents	1.064	1.129	1.188	1.068	17			
18 Gross freight earnings, per train mile.....cents	181.58	190.7	183.018	187.199	18			
19 Gross freight earnings, per car mile.....cents	9.049	9.53	10.653	10.662	19			
20 Percentage of freight expenses to earnings.....					20			
21 Principal articles of freight and percentage of tonnage from each	24.6.....	Prod. of Agriculture.....	21.2	21	33.4.....	Manufactures.....	33.5	21
	21.1.....	Lumber.....	22		32.7.....	Lumber and Logs.....	30.1	
	20.5.....	Manufactures.....	17		13.4.....	Prod. of Agriculture.....	10.7	
	12.9.....	Fertilizers.....	11.1		11.....	Products of Mines.....	14.9	
	9.4.....	Bituminous Coal.....	15.7					

a Report not clear on this point.

## Statistics of Physical Condition.

Name of Railroad.....	NASHVILLE, CHATTANOOGA AND ST. LOUIS.		MEXICAN CENTRAL.		
	JUNE 30, 1901.	JUNE 30, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.	
Year ending.....					
1 Mileage owned.....	805	805	1 2,124	2,311	1
2 Mileage owned, leased and controlled by ownership of Stock.....	1,196	1,196	2 2,124	2,322	2
3 Average mileage operated.....	1,195	1,195	3 2,054	2,135	3
4 Mileage ballasted.....			4 .....	513	4
5 Mileage of various kinds of ballast.....			5 ..... Stock.....	405	5
			..... Tezonitic.....	31	
			..... Partial ballast.....	61	
6 Mileage of second, third and fourth main tracks.....			6 .....		6
7 Mileage of yard and side tracks.....	288	298	7 228	251	7
8 Number of ties renewed in track, per mile.....	520	457	8 247	222	8
9 Mileage of various weight rails.....	38 to 80 lbs. per yd.		9 56, 66 and 75 lbs. per yd.		9
10 Number of Locomotives owned, per mile.....	.163	.166	10 .122	.118	10
11 Average tractive power of Locomotives..... pounds			11 .....	22,085	11
12 Number of Freight Cars owned, per mile.....	5,513	5,514	12 2,14	2,12	12
13 Average capacity of Freight Cars..... pounds		52,314	13 50,340	51,740	13
14 Number of Passenger Cars owned, per mile.....	.162	.172	14 .068	.068	14
15 Aggregate length wooden bridges and trestles.....feet			15 51,933	50,528	15

## Statistics of--Assets and Liabilities--Income and Expenses.

Name of Railroad.....	NASHVILLE, CHATTANOOGA AND ST. LOUIS.		MEXICAN CENTRAL.	
	JUNE 30, 1901.	JUNE 30, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
<b>ASSETS AND LIABILITIES.</b>				
1 Stocks outstanding, per mile.....	8,368	8,368	1 23,347	22,461
2 Bonds outstanding, per mile.....	13,107	13,107	2 49,841	49,874
3 Total Stocks and Bonds, per mile.....	21,775	21,775	3 73,188	72,335
4 Various Stocks and Bonds in Treasury, per mile.....	a 847	a 825	4 983	959
5 Fixed Charges, including Taxes, per mile.....	1,554	1,560	5 1,333	1,369
6 Percentage of Fixed Charges and Taxes to Earnings.....	24.4	23.3	6 15.9	16.7
7 Charges ahead of Common Stock, per mile.....	1,554	1,560	7 1,757	1,822
8 Amount of Common Stock outstanding, per mile.....	8,368	8,368	8 23,347	22,461
9 Total Current Assets.....	1,025,081	1,240,433	9 2,248,528	2,450,885
10 Total Current Liabilities.....	2,191,745	1,889,324	10 1,118,778	10,467,801
11 Total Surplus.....	2,268,434	2,798,325	11 6,083	180,932
12 Total Surplus, per mile.....	1,898	2,342	12 3	85
13 Reserve Funds, for Betterments, per mile.....			13 60	73
<b>INCOME AND EXPENSES.</b>				
14 Gross Earnings, per mile.....	6,377	6,688	14 b 8,381	b 8,193
15 Percentage of Gross Earnings to Capital.....	29.7	30.7	15 11.2	11.6
16 Expenses, per mile.....	4,277	4,705	16 b 5,768	b 5,857
17 Percentage of Expenses to Gross Earnings.....	67.1	70.3	17 68.8	71.5
18 Net Earnings, per mile.....	2,100	1,983	18 b 2,616	b 2,335
19 Additional Miscellaneous Income, per mile.....	19	15	19	334
20 Expenses for Maintenance of Way and Structure, per mile.....	1,064	1,159	20 b 1,055	b 959
21 Expenses for Maintenance of Equipment, per mile.....	567	865	21 b 1,099	b 1,211
22 Percentage of Gross Earnings for Maintenance.....	25.6	30.3	22 25.6	26.5
23 Percentage of Expenses for Maintenance.....	38.1	43	23 37.3	37
24 Expenses for Conducting Transportation, per mile.....	2,483	2,515	24 b 3,156	b 3,173
25 General Expenses, per mile.....	162	166	25 b 459	b 515
26 Percentage of Gross for Conduct. Trans. and General Expenses.....	41.5	40	26 43.1	45
27 Surplus Earnings, per mile.....	518	439	27 c 107	82
28 Percentage of Gross Earnings for Surplus.....	8.1	6.6	28	1
29 Betterments charged to Reserve Funds, per mile.....			29	

a Cost to Company.

b Statistics in Mexican currency.

c Deficit instead of surplus, after deducting \$129 per mile, amount in excess of miscellaneous income, owed and paid to the Subsidy Trust Fund.

## Statistics of Maintenance Expenses—Passenger Traffic.

Name of Railroad.....	NASHVILLE, CHATTANOOGA AND ST. LOUIS.		MEXICAN CENTRAL.	
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
<b>MAINTENANCE EXPENSES.</b>				
1 Maintenance of Way and Structure, per ton mile..... cents	.2	.21	1	1
2 Maintenance of Equipment, per ton mile..... cents	.107	.157	2	2
3 Maintenance of Passenger Cars, per car.....	443	606	3	3
4 Maintenance of Freight Cars, per car.....	37	50	4	4
5 Maintenance of Locomotives, per locomotive.....	1,565	1,971	5	5
6 Maintenance of Passenger Cars, per car, per mile run..... cents	.956	1.245	6	6
7 Maintenance of Freight Cars, per car, per mile run..... cents	.443	.563	7	7
8 Maintenance of Locomotives, per locomotive, per mile run..... cents	3.91	4.99	8	8
<b>PASSENGER TRAFFIC.</b>				
9 Number of passengers carried, per mile.....	1,227	1,298	9	9
10 Passenger miles, per mile.....	49,216	52,800	10	10
11 Passenger train mileage, per mile.....	1,426	1,608	11	11
12 Passenger car mileage, per mile.....	7,582	8,391	12	12
13 Passenger car mileage, per car.....	46,340	48,656	13	13
14 Average number of cars, per passenger train.....	5.3	5.2	14	14
15 Average number of passengers, per passenger train.....	34.5	32.8	15	15
16 Average number of passengers, per car.....	6.5	6.3	16	16
17 Average distance travelled, per passenger..... miles	40	41	17	17
18 Gross earnings, per passenger..... cents	102	101	18	18
19 Gross earnings, per passenger, per mile travelled..... cents	2.56	2.49	19	19
20 Gross passenger earnings, per train mile..... cents	102	95	20	20
21 Gross passenger earnings, per car mile..... cents	19.25	18.27	21	21
22 Percentage of passenger expenses to earnings.....			22	22

*a Mexican currency.*

## Statistics of Freight Traffic.

Name of Railroad.....	NASHVILLE, CHATTANOOGA AND ST. LOUIS.		MEXICAN CENTRAL.	
Year ending.....	JUNE 30, 1901.	JUNE 30, 1902.	DECEMBER 31, 1900.	DECEMBER 31, 1901.
1 Number of revenue tons carried, per mile.....	3,416	3,592	1	1
2 Revenue ton miles, per mile.....	530,912	551,703	2	2
3 Freight train mileage, per mile.....	3,177	3,037	3	3
4 Locomotive mileage, per mile.....	6,462	6,542	4	4
5 Freight car mileage, per mile.....	61,005	57,317	5	5
6 Locomotive mileage, per locomotive.....	40,012	39,435	6	6
7 Freight car mileage, per car.....	a 8,461	a 8,842	7	7
8 Freight car mileage, per car, per day.....	a 23.2	a 24.2	8	8
9 Average number of all freight cars, per freight train.....	19.2	18.9	9	9
10 Average number of empty freight cars, per freight train.....	.....	.....	10	10
11 Percentage of loaded car mileage to total car mileage.....	.....	.....	11	11
12 Average revenue tons, per freight train.....	167	182	12	12
13 Average revenue tons, per loaded car.....	.....	.....	13	13
14 Average revenue tons, per loaded and empty car.....	8.7	9.6	14	14
15 Average distance of haul, per ton of freight.....miles	155	154	15	15
16 Gross earnings, per ton.....cents	137	137	16	16
17 Gross earnings, per ton, per mile hauled.....cents	.88	.89	17	17
18 Gross freight earnings, per train mile.....cents	151	167	18	18
19 Gross freight earnings, per car mile.....cents	7.865	8.836	19	19
20 Percentage of freight expenses to earnings.....	.....	.....	20	20
21 Principal articles of freight and percentage of tonnage from each	{ 19.8.....Grain and Flour.....17.8 16.9.....Coal and Coke.....19 16.1.....Prod. of Forests.....17.3 15.9.....Manufactures.....17.3 }		21	21

a Report not clear on this point.

GEORGE W. YOUNG, PRESIDENT.  
OSCAR L. GUBELMAN, VICE-PRESIDENT.

WILLIAM C. SHERWOOD, VICE-PRESIDENT.

EDMUND W. WAKELEE, TREASURER.  
CHARLES L. YOUNG, SECRETARY.

# Registrar and Transfer Company,

15 EXCHANGE PLACE, JERSEY CITY, N. J.

EXECUTIVE OFFICE:

MUTUAL LIFE BUILDING, NEW YORK CITY.

Furnishes all facilities for Organization of Corporations in New Jersey and New York; provides Principal Offices, with Agents in Charge, and Private Meeting Rooms, and offers generally every facility for Compliance with the Corporation Laws. Acts as Transfer Agent and Registrar of Stocks and Bonds. Executes Trusts.

*Maintains the Most Thoroughly Equipped Transfer Department in New York for Corporations of all States.*

## DIRECTORS:

C. C. CUVLER,  
Cuyler, Morgan & Co.  
OSCAR L. GUBELMAN,  
*Secretary and Treasurer Commercial Trust Company of New Jersey.*  
JOHN W. HARDENBERGII,  
*President Commercial Trust Company of New Jersey.*  
ROBERT S. ROSS,  
*Vice-President Commercial Trust Company of New Jersey.*

WILLIAM C. SHERWOOD,  
*Vice-President of the Company.*  
EDMUND W. WAKELEE,  
*Treasurer of the Company.*  
GEORGE W. YOUNG,  
*President United States Mortgage and Trust Company.*  
JAMES C. YOUNG,  
*President National Realty Company.*

## APPENDIX.

(Arranged Alphabetically.)

It is not desired to recover a field already well covered by scores of books. The following list is therefore brief and is added merely for ready reference. It presents, usually without deducting treasury holdings, the total amount of stocks and bonds outstanding on each of the railroads analyzed in the preceding pages; also the dividend record for the last few years. Where dividends on common stocks are recorded, it is to be understood, of course, that the full preferred dividends were also paid.

The surplus of each road is given for the latest fiscal year; this surplus is the amount of net income remaining after fixed charges have been satisfied, but before any appropriations for extraordinary improvements.

## ANN ARBOR RAILROAD—

Common stock outstanding .....	\$3,250,000
Preferred stock (5%) outstanding .....	4,000,000
Bonds outstanding .....	7,000,000
Surplus for dividends, 1901-1902, \$187,856.	

## ATCHISON, TOPEKA AND SANTA FE RAILWAY—

Common stock outstanding .....	\$102,000,000
Preferred stock (5%) outstanding .....	114,159,530
Bonds outstanding .....	235,923,500
Dividends on Common, 1901, 8½%; 1902, 4%.	
Surplus for dividends, 1901-1902, \$15,564,527.	

## BALTIMORE AND OHIO RAILROAD—

Common stock outstanding .....	\$118,496,200
Preferred stock (4%) outstanding .....	53,361,267
Bonds outstanding .....	234,013,745
Including 4% Debentures, amounting to \$708,000, convertible into Common stock at par, on any interest day, on 30 days' notice, and redeemable at par on any interest day.	
Dividends on Common stock, 1900, 2%; 1901, 4%; 1902, 4%.	
Surplus for dividends, 1901-1902, \$9,030,945.	

## BOSTON AND MAINE RAILROAD—

Common stock outstanding .....	\$29,634,794
—of which \$1,128,200 is in the treasury of the Company.	
Preferred stock (6%) outstanding .....	3,149,800
Portland, Saco & Portsmouth R. R. stock outstanding .....	3,200
Portsmouth and Dover R. R. stock outstanding .....	77
—convertible into Boston & Maine Common stock.	
Bonds outstanding .....	30,192,242
Dividends, 1894 to 1899, 6% per year; 1900 to 1902, 7% per year.	
Surplus for dividends, 1901-1902, \$1,786,725.	

## BUFFALO, ROCHESTER AND PITTSBURGH RAILWAY—

Common stock outstanding .....	\$7,000,000
Preferred stock outstanding .....	6,000,000
Bonds outstanding .....	12,882,000
Preferred stock entitled to 6% dividends, then the Common to 6%, then both share <i>pro rata</i> .	
Dividends on Common stock, 1901, 1%; 1902, 4%.	
Surplus for dividends, 1901-1902, \$1,274,265.	

## BURLINGTON, CEDAR RAPIDS AND NORTHERN RAILWAY—

Stock outstanding .....	\$7,121,740
Bonds outstanding .....	15,763,000
Dividends, 1896 to 1898, 4% per year; 1899, 8%; 1900, 8%; 1901, 6%; 1902, 6%.	
Surplus for dividends, 1901, \$1,163,101.	

## CANADIAN PACIFIC RAILWAY—

Common stock outstanding .....	\$72,621,162
Preferred stock (4%) outstanding .....	31,171,000
Consolidated Debenture stock (4%) outstanding .....	68,532,416
Bonds outstanding .....	63,668,086
Dividends on Common stock, 1899, 4%; 1900, 4½%; 1901 and 1902, 5% per year.	
Surplus for dividends on Common stock, 1901-1902, \$7,703,914.	

## CANADA SOUTHERN RAILWAY—

(See Michigan Central Railroad.)

## CENTRAL OF GEORGIA RAILWAY—

Stock outstanding .....	\$5,000,000
First Preference Income bonds (5%) outstanding .....	4,000,000
Second Preference Income bonds (5%) outstanding .....	7,000,000
Third Preference Income bonds (5%) outstanding .....	4,000,000
Fixed Interest bonds outstanding .....	34,146,000
Interest payments, First Income bonds, 1898, 2%; 1899, 2%; 1900, 3¼%; 1901, 5%; 1902, 3%.	
Surplus for interest on income bonds, 1901-1902, \$122,911.	

## CENTRAL RAILROAD OF NEW JERSEY—

Stock outstanding .....	\$27,411,800
Bonds outstanding .....	47,731,292
Dividends, 1899, 4%; 1900, 5%; 1901, 5%; 1902, 8%.	
Surplus for dividends, 1901, \$3,223,483.	

## CHESAPEAKE AND OHIO RAILWAY—

Common stock outstanding .....	\$60,529,500
First Preferred stock (5%) outstanding .....	10,800
Second Preferred stock (5%) outstanding .....	800
Bonds outstanding .....	71,650,354
Dividends, 1899, 1%; 1900, 1%; 1901, 1%; 1902, 1%.	
Surplus for dividends on Common stock, 1901-1902, \$2,060,409.	



## ANALYSIS OF RAILROAD REPORTS.

## CHICAGO AND ALTON RAILWAY—

Common stock outstanding.....	\$19,512,800
Preferred stock (4%) outstanding.....	19,544,000
Bonds.....	51,000,000
Dividends on Preferred stock, 1901, 4%; 1902, 4%.	
Surplus for dividends, 1901-1902, \$825,311.	

## CHICAGO, BURLINGTON AND QUINCY RAILROAD—

Stock outstanding.....	\$110,800,600
Bonds outstanding.....	152,072,400
—includes bonds held in sinking fund, but not yet canceled, amounting to \$13,302,500.	
Dividends, 1898, 5½%; 1899 to 1901, 6% per year; 1902, 7%.	
Surplus for dividends, 1901-1902, \$10,083,111.	

## CHICAGO AND EASTERN ILLINOIS RAILROAD—

Common stock outstanding.....	\$7,197,800
Preferred stock (6%) outstanding.....	6,830,700
Bonds outstanding.....	24,650,392
Dividends on Common stock, 1898, 2½%; 1899, 3¼%; 1900, 4¼%; 1901, 5¼%; 1902, 6%.	
Surplus for dividends, 1901-1902, \$1,448,882.	

## CHICAGO GREAT WESTERN RAILWAY—

Common stock outstanding.....	\$23,383,395
Debenture stock (4%) outstanding.....	24,327,089
Preferred A stock (5%) outstanding.....	11,390,100
Preferred B stock (4%) outstanding.....	9,468,060
Loans outstanding.....	2,612,000
Dividends on Preferred A stock, 1899, 4%; 1900, 5%; 1901, 5%; 1902, 5%.	
Surplus for dividends on A stock, 1901-1902, \$589,645.	

## CHICAGO, INDIANAPOLIS AND LOUISVILLE RAILWAY—

Common stock outstanding.....	\$10,500,000
Preferred stock (4%) outstanding.....	5,000,000
Bonds outstanding.....	13,842,000
Dividends on Preferred, 1899, 1%; 1900, 2%; 1901-1902, 4% per year.	
Dividends on Common, 1902, 1%.	
Surplus for dividends, 1901-1902, \$86,175.	

## CHICAGO, MILWAUKEE AND ST. PAUL RAILWAY—

Common stock outstanding.....	\$58,183,900
Preferred stock outstanding.....	46,682,400
Bonds outstanding.....	124,796,500
Preferred stock entitled to 7% dividends; then the Common to 7%; then both share <i>pro rata</i> .	
Dividends on Common stock, 1897 to 1900, 5% per year; 1901, 6%; 1902, 7%.	
Surplus for dividends, 1901-1902, \$12,115,458.	

## CHICAGO AND NORTH WESTERN RAILWAY—

Common stock outstanding.....	\$39,114,678
Preferred stock outstanding.....	22,395,120
Bonds outstanding.....	115,606,000
Preferred stock is entitled to 7% dividends; then the Common to 7%; then the Preferred to 3% more; then the Common to 3% more; after 10% they share <i>pro rata</i> .	
Dividends on Preferred stock, 1886 to 1901, 7% per year; 1902, 7% and 1% extra.	
Dividends on Common stock, 1886 to 1899, 5% per year; 1900, 6%; 1901, 6%; 1902, 6% and 1% extra.	
Surplus for dividends, 1901-1902, \$10,574,825.	

## CHICAGO, ROCK ISLAND AND PACIFIC RAILWAY—

Stock outstanding.....	\$59,961,960
Bonds outstanding.....	71,081,000
Dividends on stock, 1888, 4½%; 1899 to 1902, 5% per year.	
Surplus for dividends, 1901-1902, \$7,220,941.	

## CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA RAILWAY—

Common stock outstanding.....	\$18,558,953
Preferred stock outstanding.....	11,259,912
Bonds outstanding.....	25,831,324
Preferred stock is entitled to 7% per dividends; then the Common to 7%; then both share <i>pro rata</i> .	
Dividends on Common stock, 1897 and 1898, 2% per year; 1899, 3¼%; 1900, 5%; 1901, 5%; 1902, February, ½% (regular annual dividend), August, 3% (beginning semi-annual payments).	
Surplus for dividends, 1901, \$2,729,251.	

## CLEVELAND, CINCINNATI, CHICAGO AND ST. LOUIS RAILWAY—

Common stock outstanding.....	\$27,989,310
Preferred stock (5%) outstanding.....	10,000,000
Cincinnati, Sandusky and Cleveland Preferred stock assumed in purchase of road, outstanding.....	428,997
Bonds outstanding.....	58,183,790
Dividends on Common stock, 1900, 3%; 1901, 3¼%; 1902, 4%.	
Surplus for dividends, 1901-1902, \$2,350,851.	

## CLEVELAND, LORAIN AND WHEELING RAILWAY—

Common stock outstanding.....	\$8,000,000
Preferred stock outstanding.....	5,000,000
Bonds outstanding.....	6,966,228
Preferred stock is entitled to 5% dividends; then the Common to 5%; then both share <i>pro rata</i> .	
Dividends on Preferred stock, 1896, 3%; none since.	
Surplus for dividends, 1901-1902, \$752,001.	

## COLORADO AND SOUTHERN RAILWAY—

Common stock outstanding.....	\$31,000,000
First Preferred stock (4%) outstanding.....	8,500,000
Second Preferred stock (4%) outstanding.....	8,500,000
Bonds outstanding.....	19,041,368
Dividends on First Preferred, 1900, 2%; 1901, 3% of which 1% marked the beginning of semi-annual payments in April and October; 1902, 3%.	
Surplus for dividends, 1901-1902, \$626,759.	



## ANALYSIS OF RAILROAD REPORTS.

149

## DELAWARE AND HUDSON—

Stock outstanding.....	\$34,645,700
Bonds outstanding.....	8,700,000
Dividends, 1889 to 1896, 7% per year; 1897 to 1900, 5% per year; 1901, 7%; 1902, 7%.	
Surplus for dividends, 1901, \$4,370,707.	

## DELAWARE, LACKAWANNA AND WESTERN RAILROAD—

Stock outstanding.....	\$26,200,000
Bonds outstanding.....	3,067,000
Dividends since 1886, 7% per year.	
Surplus for dividends, 1901, \$5,372,361.	

## DENVER AND RIO GRANDE RAILROAD—

Common stock outstanding.....	\$38,000,000
Preferred stock (5%) outstanding.....	41,400,000
Bonds outstanding.....	73,096,100
Dividends on Preferred stock, 1899, 4%; 1900, 4%; 1901, 5%; 1902, 5%.	
Surplus for dividends, 1901-1902, \$3,302,625.	

## ERIE RAILROAD—

Common stock outstanding.....	\$112,378,900
First Preferred stock (4%) outstanding.....	47,892,400
Second Preferred stock (4%) outstanding.....	10,000,000
Bonds outstanding.....	187,531,380
Dividends on First Preferred stock, 1901, 11%; 1902, 3%.	
Surplus for dividends, 1901-1902, \$4,384,677.	

## EVANSVILLE AND TERRA HAUTE RAILROAD—

Common stock outstanding.....	\$3,987,333
Preferred stock (5%) outstanding.....	1,282,417
Bonds outstanding.....	8,578,000
Dividends on Common stock, 1899, 2%; 1900, 3%; 1901, 1½%; 1902, no dividend.	
Surplus for dividends, 1901-1902, \$264,032.	

## FORT WORTH AND DENVER CITY RAILWAY—

Common stock outstanding.....	\$6,835,008
Preferred stock (4%) outstanding.....	2,539,992
Bonds outstanding.....	8,228,000
Dividends on Preferred stock, 1898, 2%; 1899, 2%; 1902, 2% out of surplus for 1899-1901.	
Surplus for dividends, 1901, \$39,980.	

## GREAT NORTHERN RAILWAY—

Stock outstanding.....	\$123,853,000
St. Paul, Minneapolis and Manitoba (6% guaranteed stock).....	433,600
Bonds outstanding.....	205,670,150
Dividends on stock, 1899, 7%; 1900, 7%; 1901, 7% and 1½% extra; 1902, 7%.	
Surplus for dividends, 1901-1902, \$15,460,236.	

## HOCKING VALLEY RAILWAY—

Common stock outstanding.....	\$10,431,600
Preferred stock outstanding.....	14,000,000
Bonds outstanding.....	30,068,711
Preferred stock is entitled to ½ dividends; then the Common to 4%; then both share <i>pro rata</i> , but the Preferred stock may be retired at par.	
Dividends on Common stock, 1901, 11½%; 1902, 3%.	
Surplus for dividends, 1901-1902, \$1,602,373.	

## ILLINOIS CENTRAL RAILROAD—

Stock outstanding.....	\$95,040,000
Leased line stock (guaranteed 4%), outstanding.....	10,000,000
Bonds outstanding.....	129,195,925
Dividends on stock, 1891 to 1899, 5% per year; 1900, 5½%; 1901, 6%; 1902, 6%.	
Surplus for dividends, 1901-1902, \$9,790,462.	

## IOWA CENTRAL RAILWAY—

Common stock outstanding.....	\$8,519,688
Preferred stock outstanding.....	5,674,296
Bonds outstanding.....	9,649,545
Preferred stock is entitled to 5% dividends; then the Common to 5%; then both share <i>pro rata</i> .	
Dividends on Preferred stock, 1899, 3%; 1900, 1½%; none since.	
Surplus for dividends, 1901-1902, \$204,538.	

## LAKE ERIE AND WESTERN RAILROAD—

Common stock outstanding.....	\$11,810,000
Preferred stock (6%) outstanding.....	11,810,000
Bonds outstanding.....	10,875,000
Dividends on Preferred stock, 1900, 2%; 1901, 4%; 1902, 4%.	
Surplus for dividends, 1901, \$474,653.	

## LAKE SHORE AND MICHIGAN SOUTHERN—

Common stock outstanding.....	\$49,466,500
Guaranteed 10% stock outstanding.....	533,500
Bonds outstanding.....	50,755,000
Dividends on Common, 1892 to 1897, 6% per year; 1898 to 1902, 7% per year.	
Surplus for dividends, 1901, \$10,744,304.	

## LEHIGH VALLEY RAILROAD—

Stock outstanding.....	\$40,441,100
Bonds outstanding.....	53,910,994
Dividends—None since 1893.	
Deficit, 1901-1902, \$1,332,777.	

## LONG ISLAND RAILROAD—

Stock outstanding.....	\$12,000,000
Bonds outstanding.....	22,329,541
Outstanding securities of leasehold estates.....	4,918,000
Surplus for dividends, 1901-1902, \$541,255.	

## LOUISVILLE AND NASHVILLE RAILROAD—

Stock outstanding.....	\$60,000,000
Bonds outstanding.....	89,603,690
Dividends, 1899, 3½%; 1900, 4%; 1901, 5%; 1902, 5%.	
Surplus for dividends, 1901-1902, \$4,725,307.	

## MEXICAN CENTRAL RAILWAY—

Stock outstanding.....	\$47,955,100
First Consolidated Income bonds (3%) outstanding.....	20,568,100
Second Consolidated Income bonds (3%) outstanding.....	11,656,200
Fixed Interest bonds outstanding.....	84,261,732
Surplus for interest on Income bonds, 1901, \$174,839.	

## ANALYSIS OF RAILROAD REPORTS.

## MICHIGAN CENTRAL RAILROAD—

(Including Canada Southern Railway).

Michigan Central stock outstanding.....	\$18,738,000
Canada Southern stock outstanding.....	15,000,000
Bonds outstanding.....	42,326,000
Canada Southern receives 40% of the net surplus after all fixed charges are paid. The amount by which either road may reduce its fixed charges, is first allowed to that road, before said division is made.	
Dividends, Canada Southern, 1897 to 1901, 3% per year; 1902, 3%.	
Dividends, Michigan Central, 1895 to 1902, 4% per year.	
Surplus for dividends, 1901, Canada Southern, \$377,071.	
Surplus for dividends, 1901, Michigan Central, \$983,296.	

## MINNEAPOLIS AND ST. LOUIS RAILROAD—

Common stock outstanding.....	\$6,000,000
Preferred stock outstanding.....	4,000,000
Bonds outstanding.....	17,871,000
Preferred stock is entitled to 5% dividends; then the Common to 5%; then both share <i>pro rata</i> .	
Dividends on Common stock, 1900, 1½%; 1901, 4%; 1902, 5%.	
Surplus for dividends, 1901-1902, \$690,724.	

## MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RAILWAY—

Common stock outstanding.....	\$14,000,000
Preferred stock (7%) outstanding.....	7,000,000
Bonds outstanding.....	34,649,000
Surplus for dividends, 1901-1902, \$1,568,501.	

## MISSOURI, KANSAS AND TEXAS RAILWAY—

Common stock outstanding.....	\$56,100,300
Preferred stock (4%) outstanding.....	13,000,000
Stock of Missouri, Kansas and Texas, outstanding.....	2,468,900
Stock of Booneville Railroad Bridge Co., outstanding.....	1,000,000
Bonds outstanding.....	81,095,808
Surplus for dividends, 1901-1902, \$908,910.	

## MISSOURI PACIFIC SYSTEM—

Stock outstanding.....	\$76,402,875
Bonds outstanding.....	137,123,137
Dividends, 1901, 2½%; 1902, 5%.	
Surplus for dividends, 1901, \$7,478,523.	

## NASHVILLE, CHATTANOOGA AND ST. LOUIS RAILWAY—

Stock outstanding.....	\$10,000,000
Bonds outstanding.....	16,021,000
Dividends, 1895 to 1898, 4% per year; 1899 to 1902, no dividend.	
Surplus for dividends, 1901-1902, \$524,711.	

## NEW YORK CENTRAL AND HUDSON RIVER RAILROAD—

Stock outstanding.....	\$131,912,900
Bonds outstanding.....	193,935,356
Dividends, 1896 to 1899, 4% per year; 1900 to 1902, 5% per year.	
Surplus for dividends, 1901-1902, \$8,016,718.	

## NEW YORK, CHICAGO AND ST. LOUIS RAILROAD—

Common stock outstanding.....	\$14,000,000
First Preferred stock (5%) outstanding.....	5,000,000
Second Preferred stock (5%) outstanding.....	11,000,000
Bonds outstanding.....	19,425,000
Dividends on Second Preferred stock, 1901, 2%; 1902, 3%.	
Surplus for dividends, 1901, \$1,374,932.	

## NEW YORK, NEW HAVEN AND HARTFORD RAILROAD—

Stock outstanding.....	\$54,685,400
Bonds outstanding.....	32,536,320
—including \$16,397,200, 4% bonds convertible into stock at par, on April 1, 1903, or within 60 days thereafter.	
Dividends, 1873 to 1893, 10% per year; 1894, 0%; 1895 to 1902, 8% per year.	
Surplus for dividends, 1901-1902, \$4,678,859.	

## NEW YORK, ONTARIO &amp; WESTERN RAILWAY—

Common stock outstanding.....	\$58,113,983
Preferred stock outstanding.....	4,000
Bonds outstanding.....	16,937,000
Surplus for dividends, 1901-1902, \$658,959.	

## NORTHERN PACIFIC RAILWAY—

Stock outstanding.....	\$155,000,000
Bonds outstanding.....	286,056,438
Dividends, 1899, 2%; 1900, 4%; 1901, 4%; 1902, 5½% (at rate of 6% per year).	
Surplus for dividends, 1901-1902, \$18,047,322.	

## NORFOLK AND WESTERN RAILWAY—

Common stock outstanding.....	\$64,469,200
Preferred stock (4%) outstanding.....	22,752,800
Bonds outstanding.....	53,151,750
Dividends on Common stock, 1901, 2%; 1902, 2½%.	
Surplus for dividends, 1901-1902, \$5,123,005.	

## PENNSYLVANIA COMPANY—

Stock outstanding.....	\$40,000,000
Bonds outstanding.....	56,477,000
Dividends, 1892 to 1894, 4%; 1901, 3%.	
Surplus for dividends, 1901, \$3,681,361.	

## PENNSYLVANIA RAILROAD—

Stock outstanding.....	\$204,572,350
Bonds outstanding.....	90,775,894
Dividends, 1893 to 1899, 5% per year; 1900, 6%; 1901, 6%; 1902, 6%.	
Surplus for dividends, 1901, \$24,194,380.	

## PITTSBURGH, CINCINNATI, CHICAGO AND ST. LOUIS RAILWAY—

Common stock outstanding.....	\$34,754,607
Preferred stock outstanding.....	22,698,566
Bonds outstanding.....	45,705,000
Preferred stock is entitled to 4% dividends; then the Common to 3%; then the Preferred to an additional 1%, making 5%; then, after the Common receives 5%, both share <i>pro rata</i> .	
Dividends on Common stock, 1901, 1%; 1902, 3%.	
Surplus for dividends, 1901, \$3,696,991.	

## READING COMPANY—

Common stock outstanding.....	\$70,000,000
First Preferred stock (4%) outstanding.....	28,000,000
Second Preferred stock (4%) outstanding.....	42,000,000
Bonds outstanding.....	98,976,191
Dividends on First Preferred stock, 1900, 3%; 1901, 4%; 1902, 3%.	
Surplus for dividends, 1901-1902, \$3,012,350.	

## ANALYSIS OF RAILROAD REPORTS.

151

## RIO GRANDE WESTERN RAILWAY—(merged in 1902 with the Denver and Rio Grande).

Common stock outstanding.....	\$10,000,000
Preferred stock outstanding.....	7,500,000
Bonds outstanding.....	27,476,600
Preferred stock is entitled to 5% dividends; then the Common to 5%; then both share <i>pro rata</i> .	
Dividends on Preferred stock, 1900, 5%; 1901, 3½%.	
Surplus for dividends, 1900-1901, \$761,954.	

## ST. JOSEPH AND GRAND ISLAND RAILWAY—

Common stock outstanding.....	\$4,600,000
First Preferred stock (5%) outstanding.....	5,490,500
Second Preferred stock (4%) outstanding.....	3,500,000
Bonds outstanding.....	3,500,000
Dividends on First Preferred stock, 1900, 3%; 1901, 5%; 1902, 5%.	
Surplus for dividends, 1901-1902, \$292,602.	

## ST. LOUIS AND SAN FRANCISCO RAILROAD—

Common stock outstanding.....	\$29,000,000
First Preferred stock (4%) outstanding.....	16,000,000
Second Preferred stock (4%) outstanding.....	5,000,000
Stock of auxiliary companies outstanding.....	12,984,100
Stock of leasehold estate—	
Kansas City, Fort Scott and Memphis Preferred (guar. 4%) out-	
standing.....	13,510,000
Kansas City, Fort Scott and Memphis Common outstanding.....	15,000,000
Bonds outstanding.....	110,628,455
Dividends on Second Preferred stock, 1901, 3½%; 1902, 4%.	
Surplus for dividends, 1901-1902, \$2,277,479.	

## ST. LOUIS SOUTHWESTERN RAILWAY—

Common stock outstanding.....	\$16,500,000
Preferred stock (5%) outstanding.....	20,000,000
Bonds outstanding.....	37,402,588
Surplus for dividends, 1901-1902, \$728,183.	

## SEABOARD AIR LINE RAILWAY—

Common stock outstanding.....	\$29,000,000
Preferred stock outstanding.....	19,400,000
Bonds outstanding.....	55,123,313
Preferred stock is entitled to 4½ dividends; then the Common to 4%; then the Preferred to 2% more, making 6%; then the Common to the balance.	
Surplus for dividends, 1901-1902, \$765,832.	

## SOUTHERN PACIFIC COMPANY—

Stock outstanding.....	\$197,849,227
Bonds outstanding.....	373,324,170
—including guaranteed bonds of other companies.	
Surplus for dividends, 1901-1902, \$10,541,471.	

## SOUTHERN RAILWAY—

Common stock outstanding.....	\$120,000,000
Preferred stock (6%) outstanding.....	80,000,000
Bonds outstanding.....	166,802,238
Dividends on Preferred stock, 1897, 1%; 1898, 1%; 1899, 2%; 1900, 3%; 1901, 4%; 1902, 5%.	
Surplus for dividends, 1901-1902, \$3,600,897.	

## TEXAS AND PACIFIC RAILWAY—

Stock outstanding.....	\$38,760,000
Second Mortgage Income bonds (5%) outstanding.....	24,980,191
—of which Company holds in its treasury, \$1,762,000.	
Fixed Interest bonds outstanding.....	30,499,359
Interest paid on Income bonds, 1900, 1½%; 1901, 1%; 1902, 5%.	
Surplus for dividends, 1901-1902, \$1,164,318.	

## TOLEDO, ST. LOUIS AND WESTERN RAILROAD—

Common stock outstanding.....	\$10,000,000
Preferred stock (4%) outstanding.....	10,000,000
Bonds outstanding.....	15,500,000
Surplus for dividends, 1901-1902, \$55,691.	

## UNION PACIFIC RAILROAD—

Common stock outstanding.....	\$104,057,900
Preferred stock (4%) outstanding.....	99,501,900
Oregon Short Line Railroad stock outstanding.....	10,000
Oregon Railroad and Navigation Common stock outstanding.....	38,210
Oregon Railroad and Navigation Preferred stock (4%) outstanding.	16,555
Bonds outstanding.....	248,038,000
—including 4% bonds amounting to \$91,952,000, convertible into Common stock at par before May 1, 1906.	
Dividends on Union Pacific Common, 1900, 3½%; 1901, 4%; 1902, 4%.	
Surplus for dividends on Union Pacific Common and Preferred stocks, 1900-1901, \$14,503,219.	

## WABASH RAILROAD—

Common stock outstanding.....	\$28,000,000
Preferred stock outstanding.....	24,000,000
Debenture "A" bonds (6%) outstanding.....	3,500,000
Debenture "B" bonds (6%) outstanding.....	26,500,000
Fixed Interest bonds outstanding.....	92,110,000
Preferred stock is entitled to 7½ dividends; then the Common to 7%; then both share <i>pro rata</i> .	
Surplus for interest on "B" bonds, 1901-1902, \$781,960.	
a Debenture "A" bonds are redeemable at par.	

## WHEELING AND LAKE ERIE RAILROAD—

Common stock outstanding.....	\$20,000,000
First Preferred stock (4%) outstanding.....	4,986,900
Second Preferred stock (4%) outstanding.....	11,993,500
Bonds outstanding.....	15,836,297
Surplus for dividends, 1900-1901, \$72,123.	

## WISCONSIN CENTRAL RAILWAY—

Common stock outstanding.....	\$16,147,876
Preferred stock (4%) outstanding.....	11,367,104
Bonds outstanding.....	26,997,959
Surplus for dividends, 1901-1902, \$480,105.	

# The Safety Car Heating and Lighting Company.

General Office—160 Broadway, New York.

Branch Offices— $\left\{ \begin{array}{l} 1017 \text{ Monadnock Building, Chicago, Ill.,} \\ 1015 \text{ Union Trust Building, St. Louis, Mo.} \end{array} \right.$

---

## Pintsch System Car and Buoy Lighting.

This Company controls in the United States and Canada the Celebrated PINTSCH SYSTEM OF CAR AND BUOY LIGHTING. It is economical, safe, efficient, and approved by railway managers and the Light House Board of the United States, and has received the Highest Awards for Excellence at the World's Expositions at Moscow, Vienna, St. Petersburg, London, Berlin, Paris, Chicago, Atlanta and Buffalo. 116,000 cars, 5,000 locomotives and 1,400 buoys are equipped with this light. 170 Railroads in the United States, Canada and Mexico have adopted this system of lighting. Applied on over 20,000 cars.

## Car Heating.

By Steam Jacket System of Hot Water Circulation, Regulating Direct Steam System, Return and Single Train Pipe Systems.———130 Railroads in the United States are using these systems of heating.———Applied on over 10,000 cars.

**AUTOMATIC STEAM TRAPS.      STRAIGHT PORT COUPLERS.**

---

Pintsch Plants are now in Operation in the Following Cities in the United States, Canada and Mexico :

ALBANY, N. Y.  
ATLANTA, GA.  
BALTIMORE, MD.  
BARSTOW, CAL.  
BOSTON, MASS. (2)  
BUFFALO, N. Y.  
CAMDEN, N. J.  
CHATTANOOGA, TENN.  
CHICAGO, ILL.  
CINCINNATI, O.  
CLEVELAND, O.

COLUMBUS, O.  
COUNCIL BLUFFS, IA.  
DENVER, COL.  
DETROIT, MICH.  
EL PASO, TEX.  
FORT WORTH, TEX.  
HAMLET, N. C.  
HOUSTON, TEXAS.  
INDIANAPOLIS, IND.  
JACKSONVILLE, FLA.  
JERSEY CITY, N. J. (4)

KANSAS CITY, MO.  
LONG ISLAND CITY, L. I.  
LOS ANGELES, CAL. (2)  
LUDLOW, KY.  
MARION, O.  
MEMPHIS, TENN.  
MEXICO, CITY OF.  
MINNEAPOLIS, MINN.  
MOBILE, ALA.  
MONCTON, N. B.  
MONTREAL, QUE.

NASHVILLE, TENN.  
NEW HAVEN, CONN.  
NEW YORK, N. Y. (2)  
OAKLAND, CAL.  
OGDEN, UTAH.  
PHILADELPHIA, PA.  
PHILLIPSBURG, N. J.  
PITTSBURG, PA.  
PORTLAND, ORE.  
ROANOKE, VA.  
ST. AUGUSTINE, FLA.

ST. LOUIS, MO.  
ST. PAUL, MINN.  
SAN ANTONIO, TEX.  
SAYANNAH, GA.  
SHREVEPORT, LA.  
SYRACUSE, N. Y.  
TEXARKANA, ARK.  
TOLEDO, O.  
WASHINGTON, D. C.  
WEEHAWKEN, N. J.

# Spencer Trask & Co.

BANKERS

27 & 29 Pine Street, New York.

Transact a general banking business; act as Fiscal Agents for corporations, and negotiate security issues of railroads and other companies. Execute commission orders and deal in

INVESTMENT SECURITIES.

Members New York Stock Exchange.

Branch Office: 67 State St., Albany.

CHARLES I. HUDSON  
Member of New York  
and Chicago Stock Exchanges

PERCY K. HUDSON  
Member of New York Stock Exchange  
and Chicago Board of Trade

GEORGE R. DYER  
Member New York Cotton Exchange  
Member New York Coffee Exchange

# C. I. HUDSON & CO.

34-36 Wall Street, New York



SPECIALISTS IN

*Unlisted, Uncurrent and Inactive Gas, Traction,  
Water and Industrial Securities*



PRIVATE LEASED WIRES TO, AND SPECIALISTS IN THE LOCAL SECURITIES OF

Buffalo  
Boston  
Baltimore  
Chicago

Cincinnati  
Cleveland  
Columbus  
Detroit

Louisville  
Milwaukee  
Norfolk  
Philadelphia

Pittsburg  
Rochester  
St. Louis  
Toronto

Wilmington  
Washington  
Wilkesbarre  
Wheeling

# THE MANUFACTURERS TRUST Co.

198 Montague Street, BROOKLYN, N. Y.



## OFFICERS.

WILLIAM J. COOMBS,	-	-	-	-	-	-	-	-	PRESIDENT.
WILLIAM H. NICHOLS,	-	-	-	-	-	-	-	-	VICE-PRESIDENT.
WILLIAM J. MATHESON,	-	-	-	-	-	-	-	-	2D VICE-PRESIDENT.
FRANK L. SNIFFEN,	-	-	-	-	-	-	-	3D VICE-PRESIDENT AND SEC'Y.	
WILLIAM C. NESMITH,	-	-	-	-	-	-	-	-	ASS'T SECRETARY.

## BOARD OF DIRECTORS.

WILLIAM H. NICHOLS  
WILLIAM J. MATHESON  
WILLIAM J. COOMBS  
SANFORD H. STEELE  
JOHN H. HANAN  
JOHN H. SCHUMANN

JAMES H. OLIPHANT  
SILAS TUTTLE  
WILLIAM A. NASH  
H. B. HAIGH  
FRANK BAILEY  
FRANK S. JONES

E. DWIGHT CHURCH  
HENRY BATTERMAN  
J. ADOLPH MOLLENHAUER  
JOHN C. ORR  
ROYAL C. PEABODY  
JOHN H. IRELAND

EDWARD HINMAN  
E. T. BEDFORD  
CHAS. O. GATES  
DANIEL P. MORSE  
H. V. V. BRAMAN  
JAMES L. MORGAN

## EXECUTIVE COMMITTEE.

WILLIAM H. NICHOLS, *Chairman.*

WILLIAM J. MATHESON  
JAMES H. OLIPHANT  
JOHN H. SCHUMANN

SANFORD H. STEELE  
E. T. BEDFORD  
FRANK BAILEY

THE PRESIDENT *Ex Officio.*



Capital, Surplus and Undivided Profits, \$1,450,879.49.

## COUNSEL.

STEELE & OTIS, 25 BROAD ST., N. Y. CITY.



# COMMERCIAL TRUST COMPANY OF NEW JERSEY

15, 17, 19 and 21 Exchange Place, Jersey City, N. J.

Capital, Surplus and Profits, \$2,700,000.

SAFE DEPOSIT VAULTS OF THE BEST MODERN CONSTRUCTION AT  
MOST ACCESSIBLE POINT TO NEW YORK

## OFFICERS:

John W. Hardenbergh, President.  
George W. Young, Vice-President.

Robert S. Ross, Vice-President.  
Oscar L. Gubelman, Sec. and Treas.

## DIRECTORS:

WALTER E. AMMON,  
AUGUST BELMONT,  
C. LEDYARD BLAIR,  
FREDERICK G. BOURNE,  
WILLIAM BRINKERHOFF,  
JOHN D. CARSCALLEN,  
FREDERIC C. CROMWELL,  
C. C. CUYLER,  
JACOB J. DETWILLER,  
CHARLES D. DICKEY.

JOHN W. HARDENBERGH,  
GEORGE G. HAVEN,  
JAMES N. JARVIE,  
ROBERT M. JARVIS,  
WILLIAM B. JENKINS,  
C. H. KELSEY,  
GUSTAV E. KISSEL,  
HENRY LEMBECK,  
JAMES A. MACDONALD,  
RICHARD A. MCCURDY,  
ROBERT H. MCCURDY.

ALLAN L. McDERMOTT,  
JAMES G. MORGAN,  
ROBERT S. ROSS,  
EDWIN A. STEVENS,  
EBEN B. THOMAS,  
MYLES TIERNEY,  
JAMES TIMPSON,  
CORNELIUS VANDERBILT,  
JOHN J. VOORHEES,  
GEORGE W. YOUNG.



J. NEVIN ROBERTS,  
WALKER P. HALL,  
MEMBERS CINCINNATI STOCK EXCHANGE,  
CHICAGO BOARD OF TRADE.

HUGH F. CRISS,  
MEMBER N. Y. STOCK EXCHANGE.  
THOMAS B. CRISS,  
MEMBER N. Y. COTTON EXCHANGE.

*ROBERTS, HALL & CRISS,*  
***BROKERS,***

*NEW YORK AND CINCINNATI.*

TELEPHONE, 2737 BROAD, N. Y.  
PRIVATE WIRE TO CINCINNATI.

45 BROADWAY,  
NEW YORK.  
33 EAST THIRD STREET,  
CINCINNATI, OHIO.

H. B. SLAVEN,  
*President and Treasurer.*

W. H. MACKAY,  
*Vice-President.*

R. E. SLAVEN,  
*Secretary.*

E. F. HINCKLEY,  
*General Manager.*

# THE CHASE GRANITE CO.

LIGHT GRAY,  
PINK AND WHITE

## GRANITE.

THOROUGH EQUIPMENT.    LARGE CAPITAL.

QUARRIES,  
BLUE HILL, MAINE.

NEW YORK OFFICE,  
5-11 BROADWAY.

# WHITE FIRE-PROOF CONSTRUCTION CO.

162-164 West 27th Street, New York

COMPLETE SYSTEM  
OF  
FIRE-PROOF CONSTRUCTION  
(PATENTED)

Fireproof Floors and Ceilings

Fireproof Partitions 2, 3 and 4 inches thick

Fireproof Elevator and Light Shafts

Metal Furring and Lathing

Write for further information

Estimates cheerfully furnished

Telephone 1076 Madison Square

*"Whom not to know argues one's self unknown."*

# Dow, Jones & Co.'s News Service

The oldest, most extensive and most complete News Agency in Wall Street.  
For over twenty years the standard by which others have been judged.  
Comprising News Bulletins and the Page Printing News Ticker.

# THE WALL STREET JOURNAL

Lays before readers a daily comprehensive review of the conditions affecting the market.

Presents clearly and forcibly the factors determining the values of securities.  
Gives quotations of all stocks and bonds listed on the New York Stock Exchange, including yields on investments.

Supplies a succinct table of railroad earnings, corrected daily, showing amount earned in capital stocks—a most valuable feature in a daily publication.

Reaches most effectively people with money to invest and to spend.

\$1.00 the month; \$12.00 the year.

***DOW, JONES & CO., Publishers*** 

**42-44 Broad Street.**

**A proverb of Wall Street:**—The advice of a reputable banker and the daily use of **The Wall Street Journal** are invaluable to one who invests money in Wall Street.

## THE NEW YORK COMMERCIAL

is strictly a business man's paper, giving accurate, reliable and early news on business topics

EVERY BUSINESS MORNING.

Truthful analyses of railroad and industrial properties, enabling the reader to form his own ideas of security values.

The Wall Street Causerie written from the inner circle.

The Commercial gives no aid in the manipulation of worthless securities.

Complete financial reports of the New York markets and the markets of Chicago, Boston and other cities.

The most readable, entertaining and accurate financial paper in New York.

The subscription price is \$5.00.

The Commercial is published by D. O. Haynes & Co., 396 Broadway, N. Y.

## METROPOLITAN ADVERTISING COMPANY

# OUR ADVERTISING DEPARTMENT

is in position to take care of your advertising, quoting you the same rates as you can obtain by dealing direct with newspapers or magazines. This you can readily see will save you considerable time and annoyance.

Your business deserves to grow, and there is no surer way to make it grow than by advertising.

SPECIAL ATTENTION GIVEN TO OUT-OF-TOWN ACCOUNTS

☛ ADVERTISING AND ☛  
DISTRIBUTING AGENTS

6 WALL STREET

 NEW YORK

# Analysis of Railroad Reports

H. C. G. BARNABY, Editor.

This statistical publication contains one hundred and thirty re-written reports of the leading railroads in the United States, and would be a valuable acquisition to the library of every person interested in railroads.

Copies of this valuable book can be had by sending \$2.00

—TO—

**METROPOLITAN ADVERTISING COMPANY,**

ADVERTISING AND DISTRIBUTING AGENTS,

**6 WALL STREET,**

NEW YORK.

# The Wall Street Summary

The leading financial and commercial  
newspaper, with the largest circulation  
amongst business men and investors.

PUBLISHED DAILY BY

**The New York News Bureau**

54 and 56 Broad Street

New York City



Subscription Rates: \$8 per Annum, \$4 for Six Months and  
\$2.50 for Three Months



# THE *Railway Age*

CHICAGO

Published Every Friday

---

*Four Dollars a Year*

Railway Officers and Directors, Investors in Railway Securities, and Students of Railway Problems, find the RAILWAY AGE of immense value. It keeps them thoroughly informed of the best thought and latest events pertaining to the administrative, operative and financial departments of railways. ❧ ❧

Published Every Friday

---

*Four Dollars a Year*

# THE *Railway Age*

CHICAGO

# CURRENT RAILWAY HISTORY

IS ACCURATELY, PROMPTLY, AND CONCISELY REPORTED  
AND RECORDED IN THE SUCCESSIVE NUMBERS OF THE

## RAILWAY WORLD

A WEEKLY NEWSPAPER DEVOTED EXCLUSIVELY TO RAILWAY,  
CORPORATION, AND FINANCIAL NEWS AND TO THE TIMELY  
DISCUSSION OF THE PROBLEMS OF MANAGEMENT AND OF  
PUBLIC POLICY CONNECTED THEREWITH \* \* \* \*

F. D. BRIGHT, President and General Manager  
H. T. NEWCOMB, Editor

137 South Fifth Street, Philadelphia, Pa.

---

### ..RATES..

Domestic Subscriptions, \$4.00 per annum in advance  
Foreign Subscriptions, \$5.00 per annum in advance  
Advertising Rates will be supplied to applicants

M. B. BROWN, *President*

G. RADFORD KELSO, *Sec'y and Manager*

# Martin B. Brown Co.

49 to 57 Park Place  
NEW YORK

## B

BLANK book manufacturers. Intricately ruled and printed books our specialty. Manufacturers of flat-opening blank books, J. Y. Huber and Workman's patents. Edition, pamphlet and booklet binders

Steel-plate and steel-die engraving, printing and embossing from hand or power presses

BARNABY'S ANALYSIS OF  
RAILROAD REPORTS

ISSUED FROM THE

MARTIN B. BROWN  
PRESS



## E

ENGRAVERS, printers and lithographers of all kinds of bonds, certificates of stock, checks, drafts, notes, certificates of deposit, bills of exchange, note and letter heads, billheads, business cards, envelopes, etc.

Wood, photo and line engraving

Railroad printing of all descriptions

## Printers, Stationers *and* Blank Book Manufacturers

# The New England Statist

BENJ. F. TYLER, } Associate Editors  
WM. A. POWELL, }

New York Office

TELEPHONE

96 Broadway and 6 Wall Street

605 Cortlandt

Rooms 104-105

---

## A GOOD INVESTMENT.

A subscription to the "Statist" is a good investment. It is vitally alert to every tick of the clock of industrial and commercial values and in close touch with all the signs of the times. Its facts and figures of trade and commerce in concise paragraphs are a daily guide for investment or speculation which will well repay perusal.

---

## ANOTHER GOOD INVESTMENT.

A standing card in the right paper may be costly, but it is the price of prestige and prestige is the price of success. Better to LIVE in the public eye than to lie dormant in a city directory.

Men do not consult directories now-a-days, but instead ask the first man they meet, "Can you give me the name of a good house to intrust some financial business to?"

Certainly, So and So is a well-known concern, you will find their card in "The Statist."

---

PUBLISHED AT 96 Broadway, 6 Wall Street, New York, and 35 Congress Street, Boston.

---

SUBSCRIPTION PRICE: One Year, \$6.00; One Month, 50c.; Per Copy, 3 cents.

Sample copy on Application.

# THE FIDELITY AND CASUALTY CO.

OF NEW YORK.

1876

Principal Office, Nos. 97-103 Cedar Street, N. Y.

1902

FIDELITY BONDS. . . . .
EMPLOYERS' LIABILITY. . .
PERSONAL ACCIDENT . . .
HEALTH . . . . .
STEAM BOILER . . . . .
PLATE GLASS . . . . .
BURGLARY . . . . .
FLY WHEEL . . . . .
BONDED LIST . . . . .

THE Assets of this Company on June 30th were \$5,190,405.23. They increased in the six months \$573,753.95. It would seem that our Policy-holders are satisfied and are speaking well of us to their friends.

As our business is very large and our Policy-holders are widely distributed, it will not be difficult for any one needing insurance to inquire about us. It is a good thing for a Policy-holder to be sure of the merit of his company, relative and absolute.

*TWENTY-SIX YEARS IN BUSINESS.*

**Losses Paid to June 30th = \$15,086,483.19**

Policy-Holders and Agents Everywhere.

WM. P. DIXON,  
ALFRED M. HOYT,  
A. B. HULL,

WM. J. MATHESON,

GEO. E. IDE,  
W. G. LOW,  
J. G. McCULLOUGH,

**DIRECTORS:**

ALEXANDER E. ORR, ANTON A. RAVEN,  
HENRY E. PIERREPONT, JOHN L. RIKER,  
GEO. F. SEWARD, W. EMLEN ROOSEVELT,  
GEO. G. WILLIAMS.

GEORGE F. SEWARD, President.

ROBERT J. HILLAS, Secretary-Treasurer.

HENRY CROSSLEY, 1st Ass't Sec'y.

FRANK E. LAW, 2nd Ass't Sec'y.

EDWARD C. LUNT, 3rd Ass't Sec'y.

# SIMON BORG & CO.

→ Bankers ←

20 Nassau Street.

NEW YORK.

MEMBERS OF NEW YORK STOCK EXCHANGE.

---

*INVESTMENT SECURITIES.*

---

Prime Bonds and Guaranteed Stocks for Savings Banks, Institutions, Trust Estates and  
Individual Investors a Specialty.

---

LIST OF INVESTMENT OFFERINGS SENT UPON APPLICATION.

# **FISK & ROBINSON**

## **BANKERS**

**35 Cedar Street  
NEW YORK**

**28 State Street  
BOSTON**

### **BANKING DEPARTMENT**

**DEPOSIT ACCOUNTS** of Corporations, Firms and Individuals received subject to sight draft. Interest allowed on daily balances and on money deposited pending investment.

### **FISCAL AGENCY**

**ACCOUNTS** for the payment of bonds, coupons, dividends, etc., and for the transfer and registration of securities received from municipal, railroad and other corporations.

### **INVESTMENT DEPARTMENT**

**UNITED STATES BONDS** and other investment securities bought and sold. Orders on the New York Stock Exchange and in sound and marketable unlisted securities executed on commission for cash. Information furnished regarding the status of corporate securities.

UNIVERSITY OF ILLINOIS-URBANA



3 0112 084205415